

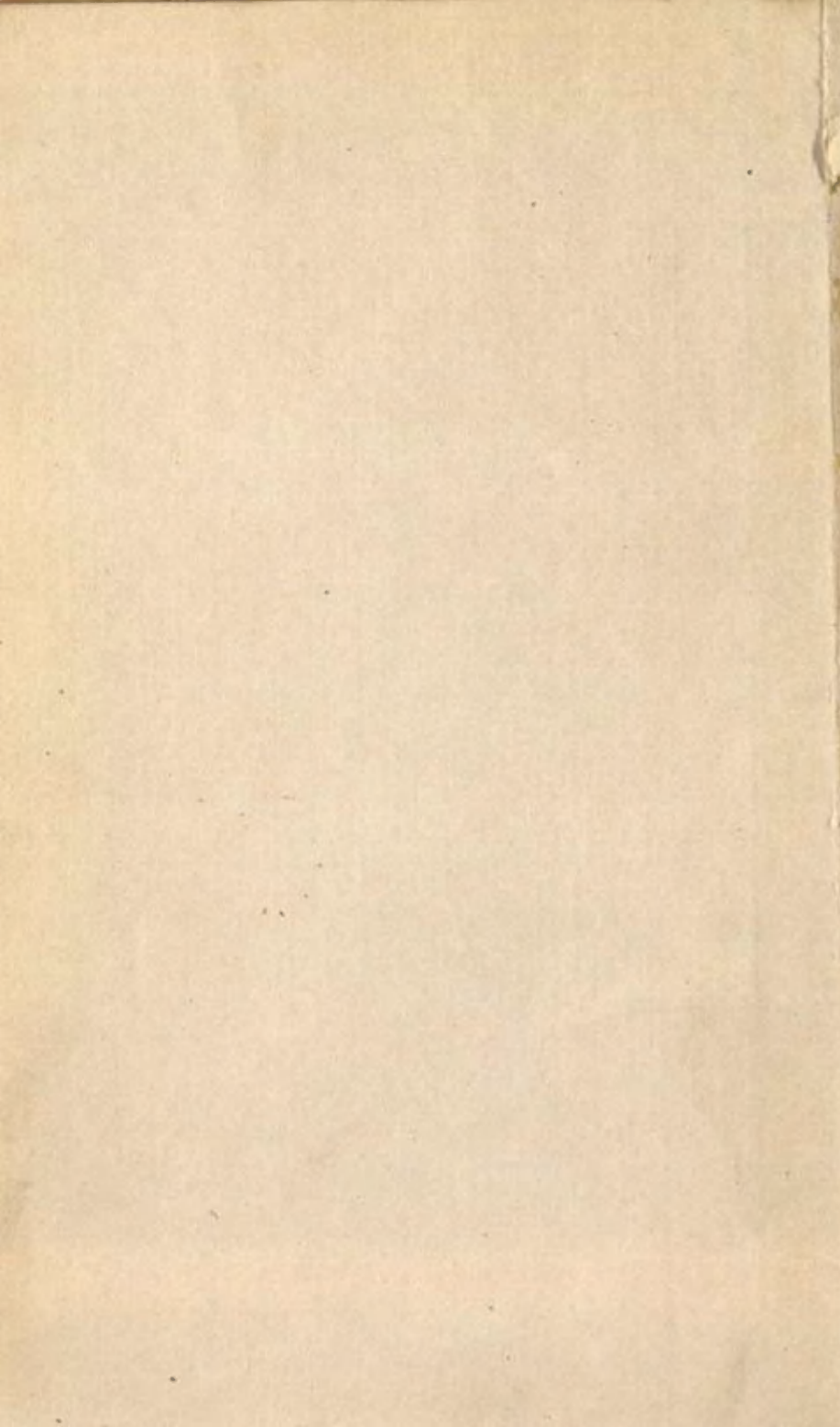
GOVERNMENT OF INDIA
ARCHÆOLOGICAL SURVEY OF INDIA
ARCHÆOLOGICAL
LIBRARY

ACCESSION NO. 34591

CALL No. 709.32/Kam

D.G.A. 79





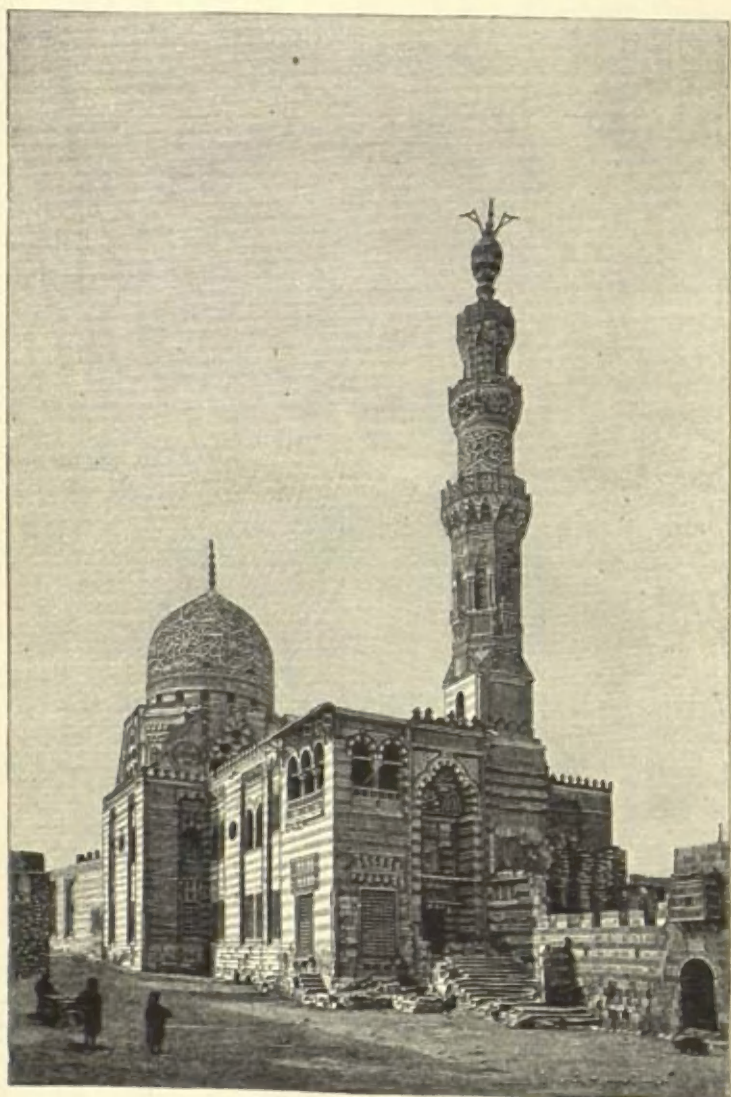
612

SOUTH KENSINGTON MUSEUM ART HANDBOOKS.

ART OF THE SARACENS IN EGYPT.

~~F 98~~





MOSQUE OF KAIT BEY.

Frontispiece.

NOT TO BE ISSUED

THE

ART OF THE SARACENS IN EGYPT

BY

STANLEY LANE-POOLE, B.A., M.R.A.S.

*Hon. Member of the Egyptian Commission for the Preservation of the
Monuments of Arab Art*

34591

With 108 Woodcuts

F 48

709.32
Lan



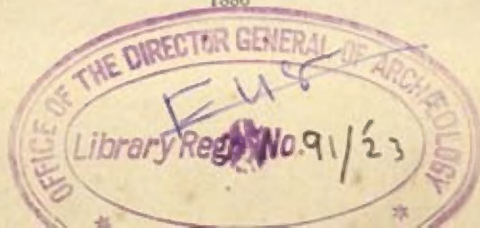
Published for the Committee of Council on Education,

BY

CHAPMAN AND HALL, LIMITED

11, HENRIETTA STREET, COVENT GARDEN

1886



CENTRAL ARCHAEOLOGICAL
LIBRARY, NEW DELHI.

Acc. No. 34591

Date..... 28.8.58

Call No..... 709.327 Lan

LONDON:

PRINTED BY J. S. VIRTUE AND CO., LIMITED,
CITY ROAD.

PREFACE.

THE subject of the following chapters is what has been commonly known as 'Arab' or 'Mohammadan' Art. Both these terms are misleading—for the artists in this style were seldom Arabs, and many of them were Christians—and the general term 'Saracenic' has therefore been substituted. 'Saracen,' which means simply Eastern, was the universal designation of Muslims in the Middle Ages, whether the paynims referred to were Syrian or Egyptian princes, like Saladin, or Barbary chiefs, or Moorish Alcaydes in Spain; and the mediaeval ring of the term Saracenic—which recalls the "proud Sarrasin" of the ballads, the *Sarrasina* artist of Italy, the Bysant *Saracenatus* of the Crusaders, and the stuff *Saracenatum*, or, as we spell it, "sarcenet"—is specially appropriate to the art about to be described. Saracenic art possesses an unmistakable style, which is instantly recognised wherever it occurs, from the pillars of Hercules and the Alcazar of Seville to the mosques of Samarkand and the ruins of Gaur in Bengal; and this style was developed and brought to perfection in the Middle Ages. The word Saracenic, implying the two ideas of Oriental and mediaeval, exactly fulfils the conditions of a general term for the art with which we are concerned.

There is a Saracenic art of Syria, with Damascus for its centre; there is a Saracenic art of Egypt; another variety is seen in the buildings of the Barbary States and Morocco; Andalusia, in the extreme west of the Mohammadan dominions; Persia, India, and Central Asia in the east; and Anatolia, Armenia, and even Turkey in Europe, between, have each their special development of the Saracenic style. Some of these varieties are perhaps better designated by their geographical positions; we speak of Persian art, Indian art; or again, the Moresque decoration, and so forth; but we must not forget that all these are but modifications of the Saracenic style, produced by the differentiating elements which were found in each country conquered by the Arabs, or introduced by the genius of some special school of artists. The mere classification of the various branches of Saracenic art, with a list of the monuments and objects illustrating each branch, would occupy a volume: so large a subject requires subdivision, and the present work therefore treats of the Egyptian branch alone, with but occasional passing glances at contemporary or derived developments. In some respects the Egyptian is the most important example of the style; for the mosques of Cairo furnish a fuller, longer, and more continuous record of the arts employed in their construction and decoration than any other series of monuments in a single Mohammadan city, and the simple lines and restrained decoration of the Egyptian artists exhibit to perfection the essential character of the Saracenic style. The mosques of Cairo give us the normal character of the art; we may go eastwards to Delhi, or west to the Alhambra, to see what a fanciful taste could add to the

normal elements; but we shall come back with the conviction that the purest form of Saracenic art, and that which most rests and satisfies the eye, is to be seen in Egypt.

In this account of the Egyptian development of Saracenic art, I have worked an almost unexplored vein. The only previous attempt to describe the art of Cairo, as a whole, is M. Prisse d'Avennes' *L'Art Arabe*, a magnificent work, unapproached in its coloured illustrations; but its volume of text is of slight value. M. Prisse, who was not in a position to consult the Arabic historians, or to decipher the inscriptions which so often determine the date of an object of Saracenic art, is naturally an uncertain guide when it is a question of anything beyond draughtsmanship. We must not trust his facts; but for his plates we cannot be too grateful. Coste's work, the *Monuments du Caire*, deserves all credit as the first of its kind, but here again the letterpress is of no scientific value, and even the drawings exhibit an imaginative power, which, however admirable it may be in the creation of works of art, is not desirable in their reproduction. M. Bourgoin's *Les Arts Arabes*, and the smaller *Éléments*, are finely illustrated, but their text is occupied almost entirely with a minute examination of the principle of geometrical ornament in Saracenic decoration, for which there is no better authority.

The first attempt at a scientific examination of the origin and development of Saracenic art was made by my father, the late Edward Stanley Poole, of the Science and Art Department, in an Appendix to the fifth edition of Lane's *Modern Egyptians*, 1860, and very little of importance has been added to the results set forth in that essay

twenty-six years ago. It is still the best authority on the subject of the sources of Arabian architecture, and the relation of the earliest buildings of the Arabs to Byzantine and Sassanian models; but of other arts, besides architecture, this essay does not treat. My own work, while it necessarily includes an outline of the principal forms and characteristics of Cairo buildings, does not presume to offer a history of Cairene architecture, for which both space and materials are at present wanting. The decorative arts, which were employed to embellish the mosques and palaces of mediaeval Egypt, form the subject of the following chapters; the history of mural sculpture, of mosaic work, wood and ivory carving, glass, pottery, and the like, is traced by means of dated examples down to the decadence which followed the Turkish conquest of Egypt; and the general characteristics of each period having thus been established at fixed points by dated specimens, the classification of undated examples becomes comparatively easy. I may perhaps be thought to have wasted time over the exact determination of the chronological sequence in each separate art, but there is so much vague generalisation abroad, and such extremely hazardous opinions are constantly ventilated, on the subject of Oriental art, that I have considered it a matter of the first consequence to cast aside all merely aesthetic canons and prejudices, and base the history of the arts I describe strictly upon sound historical evidence. An art critic is none the worse off when the date of an object is fixed by historical proofs; and those who are not versed in the principles of art criticism will be glad to have definite facts to go upon.

The authorities of which I have made use will be found referred to in the footnotes. Beyond the materials supplied by accurate drawings, like those of Prisse and Girault de Prangey, European books on this subject are few, and consist chiefly in short papers in periodical publications, such as M. Adrien de Longpérier's in the *Revue Archéologique*, or M. Lavoix' in the *Gazette des Beaux-Arts*; or else notes, scattered through the pages of books like Colonel Yule's invaluable *Marco Polo*, or M. Schefer's *Nāsir-i-Khusrau*. Reinaud's description of the Duke de Blacas' collection (*Monuments Musulmans*) deserves special notice, as the first scientific account of any large series of Saracenic works of art, and also because it abounds in valuable information, especially in reference to metal-work. In my great-uncle's *Modern Egyptians* the buildings and furniture of Cairo are carefully and clearly described, but the subject of Mr. Lane's book was the manners and customs of the modern people, and not the art of their forefathers. In special departments, Mr. Nesbitt's *Catalogue of the Glass Vessels in the South Kensington Museum*, Mr. Fortnum's corresponding *Catalogue of the Maiolica, &c.*, and Fischbach's *Geschichte der Textil-Kunst* have been consulted. Eastern historians are as a rule singularly destitute of the sort of information we require about the art of the various dynasties and capitals: they tell us how many pieces of gold a certain mosque or pulpit cost, but they seldom record where or how it was made, or who were its designers. Nevertheless there are a certain number of valuable indications scattered among the Arabic writers, and these have been collected, from the works of such historians and travellers as El-Mes'ūdy,

Es-Suyūṭy, Ibn-Khaldūn, El-Makkary, Ibn-Batūta, Nāsiri-Khusrau, ‘Abd-el-Latif, &c., &c., and, above all, from the treasure-house of the mediæval topography and history of Egypt, El-Makrizy’s *Khilat* and *History of the Mamlūks*.

I have to acknowledge much private assistance from friends who have made Saracenic art their study. Mr. J. W. Wild, the curator of Sir John Soane’s Museum, than whom there lives no better authority on the architecture of Cairo, has kindly read and approved the second, third, and fourth chapters, on architecture, stone and plaster, and mosaic, and generously placed his interesting Egyptian notes and sketch-books at my disposal. Mr. H. C. Kay, whose long residence in Egypt and special study of Arabic mural inscriptions give his criticisms a high value, has read the proof sheets of most of the work, and some important additions have been made at his suggestion. Mr. A. W. Franks, the keeper of mediæval antiquities in the British Museum, and his assistant, Mr. C. H. Read, have given me every aid in studying the fine collection of Saracenic metal-work under their care, and have also seen the chapters on metal-work, glass, and pottery in the proofs. M. Charles Schefer has sent me some useful references from his valuable notes and materials. To Franz Pasha, the architect to the Ministry of Wakfs in Cairo, I am indebted, not only for giving me every facility when in Cairo in 1883 for studying, photographing, and taking casts from, the monuments, but also for having ever since kept me supplied with photographs and reports of great value for the present work.

With regard to the orthography of Eastern names, I

have tried to be accurate without pedantry. I have neglected diacritical points, which were not required in a book destined for the general student, and I have not spelt Koran with a Q. The vowels *a*, *e*, *i*, *u*, with the prolonged sounds *â*, *î*, *û*, are to be sounded as in Italian; *ey* is to be sounded as in they; *aw* as "ow" in now; (') represents the guttural 'eyn, and *g* (or more strictly *ġ*), may be pronounced either as English *j* or hard *g*. The latter is the usual Cairo pronunciation.

I must not conclude without expressing my obligations to Mr. J. D. Cooper, who has expended even more than his usual care and skill upon the execution of the woodcuts illustrating this work.

S. L.-P.

RICHMOND,

February, 1886.



CONTENTS.

CHAPTER I.

THE SARACENS OF EGYPT

PAGE

1

CHAPTER II.

ARCHITECTURE

47

CHAPTER III.

STONE AND PLASTER

89

CHAPTER IV.

MOSAIC

103

CHAPTER V.

WOOD-WORK

111

CHAPTER VI.

IVORY

145

CHAPTER VII.

METAL-WORK

151

CHAPTER VIII.

GLASS

206

CONTENTS.

CHAPTER IX.

HERALDRY ON GLASS AND METAL	226
---------------------------------------	-----

CHAPTER X.

POTTERY	232
-------------------	-----

CHAPTER XI.

TEXTILE FABRICS	239
---------------------------	-----

CHAPTER XII.

ILLUMINATED MANUSCRIPTS	253
-----------------------------------	-----

INDEX OF NAMES, &c.	261
-----------------------------	-----

LIST OF ILLUSTRATIONS.

FIG.	PAGE
1. MOSQUE OF KAIT BEY	<i>Frontispiece</i>
2. EAST COLONNADE OF THE MOSQUE OF 'AMR	50
3. PLAN OF THE MOSQUE OF 'AMR	51
4. MOSQUE OF IBN-TULUN	55
5. ARCADES IN MOSQUE OF IBN-TULUN (Ninth Century)	58
6. DIAGRAM SHOWING PROPORTIONS OF A DOME	61
7. PLAN OF THE MOSQUE OF SULTAN HASAN	62
8. ORNAMENT FROM THE PORTAL OF SULTAN HASAN	67
9. KUFIC FAIRKE IN MOSQUE OF SULTAN HASAN (Fourteenth Century)	68
10. DOORWAY OF SMALLER MOSQUE OF KAIT BEY (Fifteenth Century)	72
11. DOORWAY OF A PRIVATE HOUSE	74
12. A STREET IN CAIRO	76
13. PLAN OF A CAIRO HOUSE.—GROUND FLOOR	78
13A. " " FIRST FLOOR	79
13B. " " SECOND FLOOR	80
14. ROSETTE IN MOSQUE OF SUYURGHATMISH (Fourteenth Century)	88
15. ROSETTE IN MOSQUE OF SULTAN HASAN (Fourteenth Century)	90
16. STONE PULPIT IN MOSQUE OF BARKUK (Early Fifteenth Century)	92
17, 18. GEOMETRICAL ORNAMENTS FROM THE WEKALA OF KAIT BEY	93

FIG.	PAGE
19. ARCHED ORNAMENT OF THE WEKALA OF KAIT BEY (Fifteenth Century)	94
20. GEOMETRICAL ORNAMENT OF THE WEKALA OF KAIT BEY. (Fifteenth Century)	96
21. ELEVATION OF PART OF THE SHOP-FRONTS OF THE WEKALA OF KAIT BEY.	99
22. ARABESQUE ORNAMENT OF WEKALA OF KAIT BEY (Fifteenth Century)	98
23, 24. GEOMETRICAL ORNAMENTS OF THE WEKALA OF KAIT BEY	99
25. ROSETTE OF THE WEKALA OF KAIT BEY (Fifteenth Century)	100
26. ARABESQUE OF THE WEKALA OF KAIT BEY	101
27. GEOMETRICAL ORNAMENT OF THE WEKALA OF KAIT BEY	102
28. MOSAIC DADO	104
29. MOSAIC PAVEMENT	105
30. MODE OF BEVELLING MOSAICS	106
31. MOSAIC PAVEMENT	109
32. CARVED PANEL OF PULPIT	112
33. CARVED PANEL OF PULPIT	113
34. PULPIT OF SULTAN KAIT BEY (Fifteenth Century)	114
35, 36, 37, 38. CARVED PANELS OF LAGIN'S PULPIT, ONCE IN THE MOSQUE OF IEN-TULUN. A.D. 1296	114
39. ARABESQUE PANEL OF LAGIN'S PULPIT, ONCE IN THE MOSQUE OF IEN-TULUN	116
40. PANEL OF LAGIN'S PULPIT, BEARING HIS NAME AND TITLES	116
41. CARVED PANELS FROM PULPIT (OF KUSUN?) (Fourteenth Century)	116
42. CARVED PANELS FROM PULPIT (OF KUSUN?) (Fourteenth Century)	118
43. CARVED PANELS OF THE TOMB OF ES-SALIH AYYUB (Thirteenth Century)	120
44. CARVED PANEL OF A SHEYKH'S TOMB. A.D. 1216	122
45. PANEL OF A DOOR FROM DAMIETTA	123
46, 47. CARVED PANELS FROM THE MARISTAN OF KALAUN (Thirteenth Century)	124
48. CARVED PANEL FROM THE MARISTAN OF KALAUN	124

LIST OF ILLUSTRATIONS.

xvii

FIG.	PAGE
49. LATTICE-WORK	125
50. LATTICE-WORK	127
51. LATTICE-WORK	129
52. LATTICE-WORK	130
53. LATTICE-WORK	131
54. LATTICE-WORK	132
55. LATTICE-WORK	133
56. LATTICE-WORK	134
56A. LATTICE-WORK	136
57. LATTICE-WORK	136
58. LATTICE-WORK	138
59. 60. CARVED AND INLAID LATTICE-WORK	138
61. PANELLED DOOR FROM A COPT'S HOUSE	140
62, 63, 64. PANELLED DOORS	140
65. CEILING OF APPLIQUÉ WORK	142
66. TABLE (KURSY)	142
67. CEILING OF A MESHREBIYA	144
68. CARVED IVORY PANEL	146
69. CARVED IVORY PANELS OF A PULPIT DOOR	146
70. INLAID IVORY AND EBONY DOOR	148
71. INLAID IVORY AND EBONY PANEL FROM A TABLE	150
72. IVORY INK HORN	150
73. INSCRIPTION INTERWOVEN WITH FIGURES ON THE "BAPTISTERY OF ST. LOUIS"	154
74. TABLE FROM MARISTAN OF KALAUN (Thirteenth Century)	158
75. PANEL OF TABLE OF EN-NASIR, SON OF KALAUN	160
76. LAMP OF SULTAN BEYBARS II. (A.D. 1309-10)	162
77. BASE OF CHANDELIER OF SULTAN EL-GHOBY (Sixteenth Century)	164
78. LANTERN OF SHEYKH 'ABD-EL-BASIT	166
79. COVER OF SHERBET BOWL (Sixteenth Century)	168
80. CASKET OF EL-'ADIL, GRAND NEPHEW OF SALADIN (Thir- teenth Century)	172
81. PERFUME-BURNER OF BEYSARY (Thirteenth Century)	176

FIG.	PAGE
82. INLAID SILVER PANELS OF THE "BAPTISTERY OF ST. LOUIS"	182
83, 84, 85, 86. BRONZE PLAQUES FROM DOOR OF BEVBARS I.	187
87. BRASS BOWL INLAID WITH SILVER (Fourteenth Century)	194
88. BRASS CANDLESTICK INLAID WITH SILVER (Fourteenth Century)	196
89. BRASS BOWL OF KAIT BEY (Fifteenth Century)	198
90. LAMP FROM JERUSALEM	200
91. ARMS FOR LION-HUNTING	204
92. DIAGRAM OF GLASS LAMP	211
93. GLASS LAMP OF ARBUGHA (Fourteenth Century)	214
94. VASE OF SULTAN BEVBARS II.	220
95, 96. STAINED GLASS WINDOWS	222
97, 98. STAINED GLASS WINDOWS	223
99. ASYUT COFFEE-POT	233
100. SILK FABRIC OF ICONIUM (Thirteenth Century)	240
101. DAMASK, WORN BY HENRY THE SAINT (Eleventh Century)	248
102. SILK FABRIC OF EGYPT OR SICILY	250
103. ILLUMINATED KORAN OF SULTAN SHA'BAN (Fourteenth Century)	254
104. ILLUMINATED KORAN OF SULTAN SHA'BAN (Fourteenth Century)	256
105. ILLUMINATED KORAN OF SULTAN EL-MUAVYAD (Fifteenth Century)	258

*. The Department is indebted to Mr. John Murray for the use of Figs. 3 and 7; to Messrs. Virtue & Co. for Figs. 2, 4, 25, 66, 71, 74—8, 99; to Messrs. Cassell for Figs. 8, 9, 13, 91, 94, 101—5; to M. LEROUX for Figs. 73, 82, 90; and to M. Giraud for Fig. 100.

THE ART OF THE SARACENS IN EGYPT.

CHAPTER I.

THE SARACENS OF EGYPT.

THE study of any branch of art supposes some acquaintance with the history of the people among whom the art was practised. Without such knowledge not only is much of the interest lost by the inability to enjoy the associations which the imagination winds about the possessions and works of historical personages,—always a strong attraction in antiquarian studies,—but we even lack the data upon which to construct a true and natural sequence of the art itself. Especially important is the aid lent by history to Mohammadan art. It frequently happens that the analogies that go to make up the style of a given period are obscure and difficult to seize in the scattered relics of Saracenic handiwork, and our only safe guides are the names of princes and nobles which the artist, allured by the fluent grace of the Arabic writing as much as by the desire to record the name of the nobleman who expended his treasure upon skilful work, was accustomed to engrave upon most of his productions. These inscriptions, which seldom record the name of the artist himself, but frequently that of the great man for whom the work was executed, are a prominent feature in Saracenic art, and form an invaluable aid to the student in establishing a definite and indisputable sequence of styles. The mosques were naturally inscribed with the name of the pious

founder; and when a later grandee devoted his wealth to restoring the sacred building, he too would place his deed on record, over the entrance, or above the niche, and his new pulpit or carved door would be duly inscribed with his name: thus we are furnished with the dates both of foundation and restoration, — a circumstance of the utmost value in Egyptian architecture. Most of the smaller objects of art, such as metal bowls, glass lamps, and trays, have inscriptions, and a large proportion of these contain the name of some Sultan or noble who is well known to history. From such information we are able in most branches of Saracenic art to weld a chain of artistic development which enables us with little difficulty to class most of the undated specimens.

In the following pages such a chain of examples of known date will be found illustrated and described; but it is not the less necessary to provide the reader with the means of ascertaining for himself the date of an example which he may possess, and which may not be susceptible of positive identification by the help of the engravings in this work. For this purpose a slight knowledge, at least, of the history of Egypt under the Saracens is necessary, and the details, which cannot be given in so brief an outline as is possible in the present limits of space, may be to some extent supplied by the chronological tables which are appended to this chapter.

The writer on the art and history of the Mohammadan East labours under the disadvantage of being obliged to begin at the very beginning; to assume in his reader an ignorance not merely of the chief names of Saracenic history, but even of whole dynasties, and their places in general history. A person of ordinary education may possess some acquaintance with the early events of the Muslim empire, the life of the Prophet Mohammad, the first sweep of conquest, and perhaps even the Khalifates of Damascus, Baghdad, and Cordova. In the later history of the Arab empire, a name here and there, a Saladin or Nūreddin, a Hākim or a Boabdil, may be known; but the rest is naturally a

blank. People have enough to learn in the present day without attempting Oriental history. In describing the art of Greece or of Italy we are generally on familiar ground ; the names of Pericles and Hiero, of the Medici and the Sforze, ought to be as well known as that of Wolsey or William of Wykeham. In Eastern history we must perforce take nothing as known until it has been explained ; and in doing so now, no discourtesy is designed towards those few who are acquainted with the history, and who will, I am sure, forgive repetition for the sake of the larger number whose studies have not been directed to Oriental subjects.

The history of Egypt under Mohammadan rulers extends from the middle of the seventh century to the present day ; but we are only concerned with that portion of those twelve centuries which bears an intimate relation to the development of Saracenic art. The earliest monument which undoubtedly preserves its original design and ornament is the mosque of Ibn-Tūlūn, built in the latter part of the ninth century (878) ; after this we have but five or six monuments of the tenth, eleventh, and twelfth centuries, and then the most brilliant period of mediaeval Egyptian art opens with the accession of the Mamlūks. Again, after the destruction of the Mamlūk power by the Ottoman conqueror Selim in the beginning of the sixteenth century, though a few rare survivals of the ancient artistic genius of the Saracens are found, and in the smaller branches of skilled industry, in wood-work, glass, and mosaic, the workmen of Egypt continued to produce some excellent results, the energy and enthusiasm of the artists languished for lack of encouragement, and as a rule the period of Turkish domination furnishes but the record of a long and dreary process of degradation in every branch of art, until the nadir of Eastern art was reached in the palaces of the Khedives. The period of the finest and most abundant works of art is that of the Mamlūks, from the thirteenth to the beginning of the sixteenth century, and to these three centuries we must devote our chief attention. Of the earlier periods a very slight outline is

all that can be attempted. The rule of the Fātimy Khalifs indeed is recorded to have been signalized by extraordinary artistic productiveness: but too few examples of this period have come down to us to justify us in giving it a rank equal to that of the Mamlūks.

The history of Mohammadan Egypt falls into eight divisions: (1) the period of governors appointed by the Khalifs of Damascus and of Baghdād ($\frac{\text{A.H. } 31-254}{\text{A.D. } 641-908}$); (2) the dynasty of Tūlūn ($\frac{254-309}{868-904}$); (3) an interval of governors appointed by the Khalifs of Baghdād ($\frac{309-323}{904-935}$); (4) the dynasty of Ikhshid ($\frac{323-358}{935-969}$); (5) the Fātimy Khalifs ($\frac{358-507}{969-1171}$); (6) the Ayyūby house of Saladin ($\frac{507-648}{1171-1250}$); (7) the Mamlūks, Turkish (Bahry) and Circassian (Burgy), ($\frac{648-929}{1250-1382}$); and (8) the period of Turkish Pashas, ending in the dynasty of Mohammad 'Alī (Mehemet Ali).

1. In A.D. 639, the eighteenth year after the Hīgra or Flight of Mohammad from Mekka to Medina, 'Amr, the general of the Khalif 'Omar, invaded the Egyptian province of the Byzantine empire. Aided by the factious divisions which sundered the Greek and Coptic Christians, and made the latter eager to welcome any invader who would bring down the arrogance of the Melekitēs, 'Amr was soon able to march on Alexandria, the first city of the East, and after a siege of fourteen months, on the first day of the Mohammadan year 21 (10th December 641), captured it. The victorious general was named the first Muslim governor of Egypt, and the spot where he pitched his tent (in Arabic, Fustāt) became the site of the new capital of Egypt, El-Fustāt, which speedily grew to handsome proportions. From the time of 'Amr, A.H. 21, to the appointment of Ibn-Tūlūn in A.H. 254, a period of 233 years, 98 governors, nominated by the Khalifs of Damascus and Baghdād, ruled the province of Misr or Egypt (the name Misr is given both to the country and to its capital); and as some of these enjoyed more than one term of office, there were 105 changes of

government in 233 years, giving an average of about two years and a quarter for each governor. A ruler liable to be removed at any moment, and enjoying so brief a term of office, was not likely to occupy himself with the embellishment of a capital which after a few months' or years' reign he might never see again, and he probably directed his energies, like a Turkish Pasha, to accumulating all the wealth he could with his brief opportunities. We have no monuments of the period of the governors, with the exception of the mosque of 'Amr, at Fustât, which has been too often restored to furnish trustworthy evidence as to the style of architecture or decoration. The governors indeed built other edifices; the representatives of the 'Abbâsy Khalifs founded in 133 a new quarter of the capital, adjoining Fustât, which was called El-'Askar, or "the Camp," because the soldiers first had their quarters there; and here they erected a government house and a mosque, of which, however, no trace now remains. El-'Askar was never more than an official quarter: the capital was still Fustât.

2. *Ahmad Ibn-Tulûn* was a Turkish governor appointed by the 'Abbâsy Khalif, in 868, but after a year he asserted his independence, while still rendering homage to the Khalif as his spiritual lord by retaining his name on the coinage and in the public prayers. Ibn-Tulûn was the first Mohammadan ruler who founded a dynasty in Egypt; he was also the first to unite Syria with Egypt, as did all independent sovereigns of Egypt afterwards; and he was the first great encourager of Saracenic Art; for he abandoned the old government house at El-'Askar, and built a new suburb, connecting that quarter with the citadel hill, which he called El-Katâi', or "the Wards," either because a large part of it was given in fief to the numerous colonels of his 30,000 troops, or because the new suburb was partitioned into various quarters allotted to different nations and separate trades. Both El-'Askar and El-Katâi' were fashionable suburbs, where the nobility and men of position resided; and the streets were full of splendid

houses. But the glory of the latest suburb was the mosque of Ibn-Tūlūn, of which we shall have more to say hereafter. It is the first undoubted example of true Saracenic art in Egypt, and one of the noblest monuments in the East. Ibn-Tūlūn also built himself a stately palace, with a *meydān* or race-course attached, where the Sultan and his courtiers played at polo. One of the many splendid gates of this meydān was called the "Gate of Lions," because it was surmounted by two lions in plaster; another was called the Sāg gate, since it was made of that wood. Around rose the handsome palaces of the generals; the mosques and the baths; the windmills and brick-kilns; the great hospital; the markets for the assayers, perfumers, cloth merchants, fruiterers, cooks, and other trades, all well built and densely populated. The palace, mosque, race-course, and hospital, together cost a sum of nearly 300,000 dinārs of gold; and the annual revenue from taxes, to meet this vast outlay, and the expenses of government, was placed at 4,300,000 dinārs. To which fact may be added the instructive comment that at the time of Ahmad's death no less than 18,000 persons were found in the prisons. His son Khumāraweyh, who succeeded in 883, carried this passion of splendid luxury to its height. He turned the meydān into a garden, filled with lilies, gilliflowers, saffron, and palms and trees of all sorts, the trunks of which he coated with copper gilt, behind which leaden pipes supplied fountains which gushed forth to water the garden. In the midst rose an aviary tower of sāg wood; the walls were carved with figures and painted with various colours. Peacocks, guinea-fowls, doves and pigeons, with rare birds from Nubia, had their home in the garden and aviary. There was also a menagerie, and especially a blue-eyed lion who crouched beside his master when he sat at table, and guarded him when he slept. In the palace, Khumāraweyh built the "Golden Hall," the walls whereof were covered with gold and azure, in admirable designs, and varied by bas-reliefs of himself and his wives (if we are to credit the historians), and even of the *prime*

donne of the court. They were carved in wood, life-size, and painted with exquisite art, so that the folds of the drapery seemed natural; they wore crowns of pure gold and turbans set with precious stones, and jewelled earrings. Such figures are unparalleled in Saracenic art; yet the account is too detailed to be altogether a fiction. But the chief wonder of Khumāraweyh's palace remains to be described: it was a lake of quicksilver. On the surface of the lake, lay a leather bed inflated with air, fastened by silk bands to four silver supports at the corners; here alone the insomnolent sovereign could take his rest. Of all these marvels, and the splendid harim rooms, the spacious stables, the furniture, wine-cups, rich silk robes, inlaid swords, and shields of steel, nothing has come down to us. We are obliged to take the mosque of Ibn-Tūlūn as witness to the consummate luxury and artistic eminence of the period.

3. After the fall of the dynasty of Tūlūn, owing to the weakness of the later members of the family, who paid the common penalty of their Capua, *governors* appointed by the Khalifs once more exercised their monotonous sway over Egypt, and again there is nothing to record in works of art.

4. Nor did the accession of Mohammad *El-Ikhshid*, in 935, bring any change for the better in this respect. El-Ikhshid followed the example of Ibn-Tūlūn, and made himself independent ruler of both Egypt and Syria, but he left no great works behind him, nor did his dynasty contribute to the monuments of the Saracens. His two sons were under the tutorship of the eunuch Abu-l-Misk Kāfūr, "Father of Musk, Camphor," who ruled the kingdom well, kept a generous open table, where 1700 pounds of meat were consumed daily, but was unable to resist the invasion of the Fātimy Khalif, El-Mu'izz, who conquered Egypt in 969, and Syria in the following year, and also annexed the Arabian provinces of the Higāz and the Yemen.

5. Hitherto the rulers of Egypt had been at least appointed by the lawful heads of the Mohammadan Empire, the Khalifs, first of

Damascus, and then of Baghdād ; many of them were Turks or Tartars, notably Ibn Tūlūn and El-Ikshīd, who both came from beyond the Oxus ; but they were not the less the servants of the Khalifs. In the Fātimy Khalifs we see for the first time an heretical line of rulers invading the empire of the Khalifs, and owning no sort of allegiance to them. The Fātimy Khalifs had created a kingdom in Tunis upon the ruins of the Aghlaby power, and now they proceeded to add the dominions of the Ikshīdis to their realm. They transferred their seat of government from Tunis to Egypt (and thereby soon lost their western provinces), and founded a new suburb, or rather a vast palace, which was called *El-Kāhira*, or Cairo. The design of the Fātimy general Gauhar was simply to build a palace for his master, the Khalif, where that sacred personage might be able to enjoy perfect seclusion ; and it was only in much later times, after the burning of Fustāt, that *El-Kāhira* became really a city. *El-Kāhira* was, in fact, originally but a walled enclosure with double earthworks, about three quarters of a mile long and half a mile broad, containing the two royal palaces, one called the Great Palace (which was so extensive that on the fall of the Fātimy dynasty, in 1171, it was found to contain 12,000 women and eunuchs), the other, the Small Palace, overlooking the pleasure-grounds ; and the two were connected under the open space which divided them (and which is still known as the street *Beyn-el-Kasreyn*, "Betwixt the Palaces"), by a subterranean passage. Close to the Eastern or Great Palace was the Imperial Mausoleum, in which El-Mu'izz deposited the bones of his ancestors, which he brought with him from their places of sepulture in the west. Further south was the mosque, also built by Gauhar, in which the Khalif, as Imām of his subjects, conducted the Friday prayers. The palaces received the name of *El-Kusūr ez-Zāhira*, "the Splendid Palaces," and the mosque that of *El-Azhar*, "the Most Splendid," which it still retains, and under which it has long been widely known as the great seat of Mohammadan learning, frequented by students from the most

distant countries of Islam. In addition to the garrison's quarters, many other buildings are enumerated, sufficient to account for the remaining space; such were the treasury, mint, library, audience-halls, arsenals, provision-stores, and imperial stables. No person was allowed to enter within the walls of El-Kāhira but the soldiers of the garrison and the highest officials of the state, whose greatest privilege was that of approaching the sacred person of the Khalif. Ambassadors from foreign lands were obliged to dismount at the gates of the fortress, and were conducted thence to the audience-hall on foot, an official on either side grasping their hands.* The old gates of Cairo are the gates of this palace or fort, built by order of Bedr el-Gemāly, in 1037, by three Greeks.

Thus the capital of Egypt underwent a third move to the north-east: first was El-Fustāt, founded by 'Amr, close to the Roman fortress of Babylon; then El-'Askar, a move north-east, built by the 'Abbāsy governors; thirdly, El-Katāi, the creation of Ibn-Tūlūn (which remained an important suburb until desolated by the great famine of El-Mustansir's reign); and now, fourthly, Cairo, the site of the Fātimy palace. Of these, the scanty remains of El-Fustāt are seen in what is called Masr-el-Atika, or "Old Cairo;" El-'Askar and El-Katāi have disappeared, save the mosque of Ibn-Tūlūn, and part of their site has been covered by later houses; El-Kāhira is Cairo, but has greatly expanded since the time when it comprised little more than the huge palace of the Fātimy Khalifs: new suburbs have joined it to the Citadel on one side, and prolonged it beyond the northern gates on the other. Yet Cairo is practically the Fātimy capital, though, unfortunately, beyond the mosques of the Azhar and El-Hākim, built in 971 and 990, and a fragment here and there, nothing remains of all the splendour which the historians attribute to these celebrated Khalifs.† Refer-

* H. C. Kay, *Al-Kahirah and its Gates*. *Journ. R. Asiatic Society*, 1882.

† E.g., in A.H. 442 died Rashidah, daughter of the Khalif El-Mu'izz, leaving an inheritance valued at 2,700,000 dinars; in her house were 12,000 robes of different colours. All the Khalifs since El-Mu'izz had impatiently expected her

ence will frequently be found in the following pages to the costly possessions of these rulers, especially those included in the well-known Inventory of El-Mustansir, and it will suffice here to remark that the Fātimis even surpassed Ibn-Tūlūn in magnificence and the encouragement of every branch of art, and that to them, more perhaps than to any other Eastern dynasty, we owe the introduction of Saracenic design into southern Europe. The Mohammadan Amirs of Sicily, who left so rich a legacy of art to the Norman kings, were vassals of the Fātimy Khalifs.

6. How Saladin—or, to be accurate, Salāh-ed-din Yūsuf, son of Ayyūb—was despatched to Egypt with the troops of Nūr-ed-din, Sultan of Damascus, to support the cause of one of those powerful vizirs who by their arrogance and rivalry had prepared the downfall of the Egyptian Government, and how the brilliant young soldier and statesman soon found his way to depose the last of the Fātimy Khalifs and assume the supreme authority himself, are almost matters of European history. The period of Ayyūby rule from 1171, when the prayers were ordered to be said no longer in the name of the heretical Khalif, but in that of the Khalif of Baghdād, the orthodox head of Islām, to the year 1250, when the sovereignty descended to the Mamlūks, falls within a century, but it was filled with wars and deeds that have made this period known even to European readers. El-Mu'izz the Fātimy had changed Egypt from a province into a kingdom with a definite political significance; Saladin transformed the kingdom into a powerful empire. The long struggle with the Crusaders, the victory of Tiberias, the conquest of Jerusalem, the well-known treaty with Richard Cœur de Lion, though most familiar to us,

death. In the same year her sister 'Abda also died and left an immense fortune. Forty pounds of wax were needed to put seals on her rooms and coffer. Among her treasures were 3000 vases of silver, enamelled and chased; 400 swords, damascened in gold; 30,000 pieces of Sicilian stuff; quantities of emeralds, rubies, and other precious stones; 90 basins and 90 ewers of purest crystal, &c. (El-Makrizy.)

form but a part of Saladin's exploits. He made his power felt far beyond the borders of Palestine; his arms triumphed over hosts of valiant princes to the banks of the Tigris, and when he died, in 1193, at the early age of 57, he left to his sons and kinsmen, not only the example of the most chivalrous, honourable, and magnanimous of kings, but substantial legacies of rich provinces, extending from Aleppo and Mesopotamia to Arabia and the Country of the Blacks.

And, like so many of his successors the Mamlûks, Saladin combined in a marked degree the passion for war with the love of the beautiful. The third wall, and the Citadel of Cairo, with its magnificent buildings, now alas destroyed, bore witness to his encouragement of architecture. The citadel was begun in 1176, with materials obtained from some of the smaller pyramids of Giza, and so strongly and carefully was it constructed that when Saladin died the fortress was not yet completed, but remained unfinished until the year 604=1207. The eunuch Karākûsh, "Black Eagle," was entrusted with the superintendence of the work, and this may account for the sculpture of an eagle on the Citadel wall. The present massive gate, within which is the passage where the massacre of the last descendants of the Mamlûks by Mohammad 'Aly took place in 1811, is an eighteenth century work, but the walls and part of the internal masonry belong to Saladin's fortress. Of the mosque and palace, however, no trace remains. The so-called "Hall of Joseph," or *Kasr Yûsuf* (which was Saladin's name as well as the patriarch's), pulled down about 1830, was really the *Dâr-el-'Adl*, or "Hall of Justice," of the Mamlûk Sultan En-Nâsir, more than a century later. The deep well with its massive masonry is, however, attributed to Saladin, and there used to be ruins of a solid and beautifully decorated mansion which was known, rightly or not, as the "House of Salâh-ed-din Yûsuf."

Saladin's empire needed a strong hand to keep it united, and the number of relations, sons and nephews, who demanded their

share of the wide provinces, rendered the survival of the Ayyūby dominion precarious. Saladin's brother, El-'Adil, the "Saphadin" of the Crusades, indeed controlled the centrifugal tendencies of his kindred for a while, and his son El-Kāmil gloriously defeated Jean de Brienne on the spot where the commemorative city of El-Mansūra, "the Victorious," was afterwards erected by the conqueror. After his death, in 1237, however, the forces which made for disintegration became too strong to be resisted; various petty dynasties of the Ayyūby family were temporarily established in the chief provinces, only to make way shortly for the Tartars, and in Egypt and Syria notably for the Mamlūks, who in 1250 succeeded to the glories of Saladin.

The monuments of the Ayyūbis that are still standing, besides the Citadel and third wall, are very few. The fine ornament of the interior in the tomb-mosque of Esh-Shāfi'y belongs at least in part to El-Kāmil; the tomb and college of Es-Sālih Ayyūb, son of El-Kāmil, are still partly preserved opposite Kalaūn's Māristān; and there are, or were, fragments of his once splendid castle on the Island of Rōda, on the Nile—the island which gave his Mamlūks the epithet of *Bahry*, or "River-y"—the materials of which were used in the construction of En-Nāsir's Mosque in the Citadel. The Kāmiliya Mosque has unhappily disappeared, though not before some valuable sketches had been made by Mr. James Wild.

7. The word *Mamlūk* means "owned," and is applied to white slaves, acquired by capture in war or purchase in the market. The two dynasties of Mamlūks were lines of white slaves, imported for the protection of the Ayyūby Es-Sālih against his kinsmen and the Franks, and who presently acquired the power and the government of Egypt. They were reinforced from time to time by fresh purchases, for the climate of Egypt was unfavourable to the fertility of foreign immigrants, and the stock had to be refreshed from outside. Es-Sālih's Mamlūks were loyal servants; they defended his kingdom while he lived, and it was their brilliant charge under Beybars that routed the French army and brought about the cap-

ture of St. Louis himself. Es-Sâlih's son was a drunken debauchee, and helpless to meet the difficulties in which his kingdom was involved. In circumstances that hardly left an alternative, he was put out of the way, and a lady, Sheger-ed-durr, "Tree of Pearls," ascended the throne of her late husband and master Es-Sâlih, as the first Slave Monarch of Mohammadan Egypt. Her rule was but brief; jealousy led her to murder the Mamlūk chief Aybek, whom she had married for political reasons, and she paid the penalty of her crime by being herself beaten to death with the bath-clogs of some female slaves who sympathized with her rival. After her death began that singular succession of Mamlūk Sultans, which lasted, in spite of special tendencies to dissolution, for two hundred and seventy-five years.

The external history of these years is monotonous. Wars to repel the invasions of the Tartars or to drive the Christians from the Holy Land, struggles between rival claimants to the throne, embassies to and from foreign powers, including France and Venice, the Khan of Persia, and the King of Abyssinia, constitute the staple of foreign affairs. To enumerate the events of each reign, or even the names of the fifty Mamlūks who sat on the throne at Cairo, would be wearisome and unprofitable to the reader: the chronological tables at the end of this chapter will tell all that need be told. But it is different with the internal affairs of the Mamlūk period. In this flowering time of Saracenic art, a real interest belongs to the life and social condition of the people who made and encouraged the finest productions of the Mohammadan artist, and it will not be superfluous to explain briefly what the condition of Egypt was under her Mamlūk rulers. Some consideration of this subject is almost demanded by the startling contrasts offered by the spectacle of a band of disorderly soldiers, to all appearance barbarians, prone to shed blood, merciless to their enemies, tyrannous to their subjects, yet delighting in the delicate refinements which art could afford them in their home life, lavish in the endowment of pious foundations, magnificent in

their mosques and palaces, and fastidious in the smallest details of dress and furniture. Allowing all that must be allowed for the passion of the barbarian for display, we are still far from an explanation how the Tartars chanced to be the noblest promoters of art, of literature, and of public works, that Egypt had known since the days of Alexander the Great.

During this brilliant period the population of Egypt was sharply divided into two classes, who had little in common with each other. One was that of the Mamlûks, or military oligarchy, the other the mass of the Egyptians. The latter were useful for cultivating the land, paying the taxes which supported the Mamlûks, and manufacturing their robes, but beyond these functions, and that of supplying the judicial and religious posts of the empire, they had small part in the business of the state, and appear to have been very seldom incorporated into the ranks of their foreign masters. The names of the Mamlûks that have descended to us in the accurate and detailed pages of El-Makrizy are generally Tartar or Turkish,* and even when they are ordinary Arabic names, they were borne by Tartars who had put on an Arabic name along with the speech, dress, and country of their adoption. In the glories, military and ceremonial, of the Mamlûks the people had no part. They were indeed thankful when a mild sovereign, like Lâgîn, ascended the throne, and when taxes were reduced and bakhshish distributed, and they would join, like all populaces, in the decoration of the streets and public rejoicings, when the Sultan

* Among the principal Mamlûk nobles of the thirteenth and fourteenth centuries the following names most frequently occur; they are Turkish or Tartar, and Mr. J. W. Redhouse, C.M.G., has kindly given me their significations: Beybars, and Bars Bey, Prince Panther; Altûnbugha, Gold (yellow) Bull; Ketbughâ, Lucky Bull; Kurt, Wolf; Tunkuz, Boar; Aktai, White Colt; Karakush, Black bird of prey, Eagle; Tughan, Falcon; Sunkur Ashkar, Bay Falcon; Aksunkur, Jerfalcon; Karasunkur, Black Falcon; Lâgîn, Perigrine Hawk; Balban, Goshawk; Singar, Bird of prey; Kalann, Duck. The preceding names are derived from animals and birds of prey, and it is probable that corresponding images were blazoned on their owners' shields. Names

came back from a career of conquest, or recovered from an illness ; but they had no voice in the government of the country, and must make the best they might of the uncertain characters of their ever-changing rulers. The men who governed the country were the body of white military slaves, who had been imported by Es-Salih, and were renewed by purchase as death or assassination reduced their numbers.

Before Es-Salih's death a certain number of his Mamlûks had risen from the ranks of common slaves to posts of honour at their master's court ; they had become cup-bearers, or tasters, or masters of the horse to his Majesty, and had been rewarded by enfranchisement ; and these freed Mamlûks became in turn masters and owners of other Mamlûks. Thus, at the very beginning of Mamlûk history, we find a number of powerful *Amîrs* (or "commanders," lords), who had risen from the ranks of the slaves and in turn become the owners of a large body of retainers, whom they led to battle, or by whose aid they aspired to ascend the throne. The only title to kingship among these nobles was personal prowess and the command of the largest number of adherents. In the absence of other influences the hereditary principle was no doubt adopted, and we find one family, that of Kalaûn, maintaining its succession to the throne for several generations, though not without brief interruptions. But as a rule the successor to the kingly power was the most powerful lord of the day, and his hold on the throne depended chiefly on

connected with the moon are common : e.g. Tûlûn, Setting Moon ; Aybek, Moon Prince ; Aydaghdy, The Moon has risen ; Aytekin, Moon-touching, tall ; others relate to steel, as Janbalât, Whose soul is steel ; Aydemir, Battle-axe ; Erdemir, Male Iron (tempered steel) ; Bektémir, Prince Iron ; Esendemir, Sound Iron ; Tukuzdemir, Pig-iron (?). Others refer to some personal characteristic, as Beysary, Prince Auburn ; Salâr, The Attacker ; Karamûn, Black Man ; Aghirlu, Sedate ; Bektût, Prince Mulberry ; Kagkar and Kagkin, Fleet in running ; Kurgy means Armour-bearer ; Takgi, Mountaineer ; Suyurghatmish, A present ; Erbek, True Prince ; Bektûsh, Prince-peer ; Satilmish, Who was sold.

his strength of following, and his conciliation of the other nobles. The annals of Mamlūk dominion are full of instances of a great lord reducing the authority of the reigning Sultan to a shadow, and then stepping over his murdered body to the throne. Most of the Mamlūks died violent deaths at the hands of rival Amirs, and the safety of the ruler of the time depended mainly upon the numbers and courage of his guard. This body-guard, or *halka*, enjoyed remarkable privileges, and was the object of continual solicitude on the part of the Sultan. As his own safety and power depended upon their fidelity, he was accustomed to bestow upon them grants of lands, rich dresses of honour, and unstinted largesse. A great part of the land of Egypt was held by the soldiers of the guard in fiefs granted by the crown,* and the Amirs who commanded them, nobles specially attached to the Sultan, and generally promoted from among his own Mamlūks, received handsome appanages. These soldiers of the guard numbered several thousand, and must have passed from Sultan to Sultan at every change of ruler; their colonels, or "Amirs over a Thousand," as they were called, became

* Beybars, following the example of Saladin, organized a feudal system by granting lands to the chief lords of his court in return for service in the field, and his arrangement appears to have lasted until the time of Lāḡin, when we find the whole land of Egypt was divided into twenty-four *kirāts*, of which four belonged to the Sultan, ten to the Amirs and the holders of royal grants, and ten to the soldiers of the guard. Lāḡin made a fresh survey and reconstructed the fiefs: ten *kirāts* were allotted to the Amirs and guard together, one was reserved for compensating the dissatisfied, four as before belonged to the Sultan, and the remaining nine were assigned to the cost of levying a new body of troops. We learn that the Sultan's sixth part comprised Boheyra, Atfih, Alexandria, Damietta, Mansalūt, with their villages, and Kōm Ahmar. The fief of Mangūtīmūr, the viceroy, included Semhoud, Edfū, Kūs, and others, and brought in a revenue of more than 100,000 *ardebbs* (each of five bushels) of grain, without reckoning money-payments, sugar-candy (for which there were seventeen factories), fruits, cattle, and wood. The only lands excepted from this general distribution among the Amirs and soldiers were the pious foundations, heritages, and the like. Lāḡin considerably reduced the value of the individual fiefs, which had previously been worth, at the time of Kalaūn, at least 10,000 francs a year.—El-Makrizy (Quatremère), II. ii. 65 ff.

important factors in the choice of rulers, and often deposed or set up a Sultan as seemed good to them. The Sultan, or chief Mamlūk, was in fact more or less, according to his character, at the mercy of the officers of his guard; and the principal check he possessed upon their ambition or discontent was found in their own mutual jealousies, which might be played upon so as to neutralize their opposition.

Each of the great lords, or Amirs, were he an officer of the guard, or a court official, or merely a private nobleman, was a Mamlūk Sultan in miniature. He too had his guard of Mamlūk slaves, who waited at his door to escort him in his rides abroad, were ready at his behest to attack the public baths and carry off the women, defended him when a rival lord besieged his palace, and followed him valiantly as he led the charge of his division on the field of battle. These great lords, with their retainers, were a constant menace to the reigning Sultan. A coalition would be formed among a certain number of disaffected nobles, with the support of some of the officers of the household and of the guard, and their retainers would mass in the approaches to the royal presence, while a trusted cup-bearer or other officer, whose duties permitted him access to the king's person, would strike the fatal blow, and the conspirators would forthwith elect one of their number to succeed to the vacant throne. This was not effected without a struggle; the royal guard was not always to be bribed or overcome, and there were generally other nobles whose interests attached them to the reigning sovereign rather than to any possible successor, except themselves, and who would be sure to oppose the plot. Then there would be a street fight; the terrified people would close their shops, run to their houses, and shut the great gates which isolated the various quarters and markets of the city; and the rival factions of Mamlūks would ride through the streets that remained open, pillaging the houses of their adversaries, carrying off women and children, holding pitched battles in the roads, and discharging

arrows and spears from the windows upon the enemy in the street below. These things were of constant occurrence, and the life of the merchant classes of Cairo must have been sufficiently exciting. We read how the great bazaar, called the Khān El-Khalīlī, was sometimes shut up for a week while these contests were going on in the streets without, and the rich merchants of Cairo huddled trembling inside the stout gates.

The contest over, and a new Sultan set on the throne, there remained the further difficulty of staying there. "J'y suis" was a much easier thing to say in Egypt than "j'y reste." The same method that raised him to power might set him down again. An example, drawn from the annals of the thirteenth century, will show better than any generalizations, the uncertain tenure of power among the fickle military oligarchy of the Mamlūks. In 693 A.H., or A.D. 1293, En-Nāsir Mohammad was raised to the throne, which had been occupied by his father Kalāūn and his brother Khalīl. En-Nāsir was a mere child, nine years old, and the real authority devolved on his Vizir (or "Viceroy," *Nāib-es-Saltana*, as this minister was generally styled under the Mamlūks), by name Ketbugha. Naturally there were several other nobles who envied Ketbugha his position of influence and authority; and one of these, Shugay, taking the lead, offered armed resistance to the authority of the Viceroy. Ketbugha's Mamlūks used to assemble at the gate of the Citadel to defend him in his progress through the city, and Shugay, with his retainers, would waylay the vice-regal *contège* as it rode through the narrow streets, and bloody conflicts ensued. The gates of the city were kept closed, and the markets were deserted, until at length Shugay was captured, and his head was paraded on a pike through the streets of Cairo. But disaffection was not quelled by the slaughter of Shugay and his followers. There dwelt a body of 300 Mamlūks called Ashrafy* (after their master El-Ashraf Khalīl) in the quarter

* It will be useful here to explain the system of Mamlūk names and titles. Every Mamlūk had (1) a proper name, such as Ketbugha, Lāgīn, Beybars,

of Cairo called El-Kebsh, and these warriors, finding their occupation gone by the murder of their master, made an attempt to seize the sovereign power. They assembled and went to the royal stables at the foot of the Citadel, and thence to the armourers' market, plundering and destroying on their way, and eventually they encamped at the gate of the Citadel, and laid siege to the fortress. Whereupon Ketbugha's immediate supporters mounted their horses and rode down to meet them. The Ashrafis were dispersed, and given over to various horrible tortures—blinded, maimed, drowned, beheaded, and hanged, or nailed to the city gate Zuweyla—and only a few were so far spared that they were allotted as slaves to their conquerors. Thus the rebellion was put down; but the next day, the Viceroy Ketbugha, calling a council of the great nobles of the Court, protested that such exhibitions were dishonourable to the kingly state, and that the dignity of Sultan would be irreparably compromised if a child like En-Nāsir were any longer suffered to occupy the

Kalaūn, generally of Tartar derivation; (2) a surname or honourable epithet, as Husām-ed-dīn, "Sword-blade of the Faith," Nūr-ed-dīn, "Light of the Faith," Nāsir-ed-dīn, "Succourer of the Faith;" (3) generally a pseudo-patronymic, as Abu-l-Feth, "Father of Victory," Abu-n-Nasr, "Father of Succour;" (4) if a Sultan, an epithet affixed to the title of Sultan or King, as El-Melik Es-Sa'īd, "The Fortunate King," El-Melik En-Nāsir, "The Succouring King," El-Melik El-Mansūr, "The Victorious King;" (5) a title of possession, implying, by its relative termination *y* or *l*, that the subject has been owned as a slave (or has been employed as an officer or retainer) by some Sultan or Lord, as El-Ashrafy, "The Slave or Mamlūk of the Sultan El-Ashraf," El-Mansūry, "The Mamlūk of the Sultan El-Mansūr." The order of these titles was as follows: first the royal title, then the honourable surname, third the patronymic, fourth the proper name, and last the possessive: as Es-Sultān El-Melik El-Mansūr Husām-ed-dīn Abu-l-Feth Lāgīn El-Mansūry, "The Sultan, Victorious King, Sword-blade of the Faith, Father of Victory, Lāgīn, Mamlūk of the Sultan El-Mansūr." It is usual, in abbreviating these numerous names, to style a Sultan by his title, El-Mansūr, &c., or by his proper name, Lāgīn, &c., omitting the rest, while a Noble (Amīr) is conveniently denoted by his proper name alone. It may be added that the word *ibn*, of frequent occurrence in these pages, means "son;" as, Ahmad ibn Tūlūn, "Son of Tūlūn."

throne. The child was therefore sent away to grow up, and Ketbugha, as a matter of course, assumed the sceptre of his ward. This was in 1295, and in the end of 1296, on his return from a journey to Syria, the new Sultan had the misfortune to excite the latent jealousy of some of the powerful nobles who accompanied him : his tent was attacked ; his guards and Mamlûks, by a devoted resistance, succeeded in enabling their master to fly, and the leader of the rebellion, Lâgin, was forthwith chosen Sultan in his stead.

Husâm-ed-din Lâgin, who now ascended the throne under the title of El-Mansûr, had originally been a slave of El-Mansûr 'Aly son of Aybek (whence he was called El-Mansûry), and had then been bought for the trifling sum of about £30 by Kalaûn, under whom he rose from the grade of page to that of *silâhdâr*, or armour-bearer ; and Kalaûn, coming to the throne, gave him the rank of Amîr and made him governor of Damascus. Kalaûn's son Khalil, on succeeding to the sovereignty, cast Lâgin into prison, and in return for this treatment Lâgin assisted in his murder. During the brief reign of Ketbugha, he held the highest office in the land, that of Viceroy (*Nâib-es-Saltana*) and now he had turned against his latest lord, and had seized the crown for himself. The terms of his election throw an interesting light upon the precarious authority of the Mamlûk Sultans. His fellow-conspirators, after the flight of Ketbugha, marched at Lâgin's stirrup, hailed him Sultan, and payed him homage ; but they exacted as a condition of their fealty that the new monarch should continue as one of themselves, do nothing without their advice, and never show undue favour towards his own Mamlûks. This he swore ; but so suspicious were they of his good faith, that they made him swear it again, openly hinting that when he was once instated he would break his vow and favour his own followers, to the injury of the nobles who had raised him to the throne. When this had been satisfactorily arranged, Es-Sultân El-Melik El-Mansûr Husâm-ed-din Lâgin, " The Sultan,

Victorious King, Sword-blade of the Faith, Lāgin," rode on to Cairo, attended by the insignia of sovereignty, with the royal parasol borne over his head by the great Lord Beysary; the prayers were said in his name in the mosques, drums were beaten in the towns he passed through; the nobles of Cairo came out to do him fealty; and, escorted by a crowd of lords and officers, he rode to the Citadel, displayed himself as Sultan to the people in the Hippodrome, and made his royal progress through the streets of the capital, from the Citadel to the Gate of Victory. The 'Abbāsy Khalif of Egypt, a poor relic of the ancient house of Baghdād, rode at his side; and before them was carried the Khalif's diploma of investiture, without which very nominal authority no Sultan in those days would have considered his coronation complete. The streets were decorated with precious silks and arms, and great was the popular rejoicing; for the benevolence and generosity of Lāgin made him a favourite with the people, and he had already promised to remit the balance of the year's taxes, and had even vowed that if he lived there should not be a single tax left. The price of food, which had risen to famine height during the late disturbances, now fell fifty per cent.; bread was cheap, and the Sultan was naturally adored.

In spite of his share in a royal murder and a treacherous usurpation, this Mamlūk Sultan seems to have deserved the affection of his subjects. Not only did he relieve the people from much of the pressure of unjust and arbitrary taxation under which they had groaned, but he abstained, at least until he fell under the influence of another mind, from the tyrannical imprisonments and tortures by which the rule of the Mamlūks was too commonly secured. His conduct to his rivals was clement to a degree hardly paralleled among the princes of his time. He did not attempt to destroy the ex-Sultan Ketbugha, but gave him a small government in Syria by way of compensation. The child En-Nāsir had nothing to fear from Lāgin, who invited him to return to Egypt, and told him that, as the Mamlūk of the boy's father,

Kalaūn, he only regarded himself as his representative, holding the throne until En-Nāsir should be old enough to assume the government himself. Lāgin was zealous in good works, gave alms largely in secret, and founded many charitable endowments. Among his services to art must be mentioned his restoration of the Mosque of Ibn-Talūn, at a cost of £10,000, to which he was impelled by the circumstance that he had found refuge in the then deserted building during the pursuit which followed the murder of Khālil. Hidden in the neglected chambers and arcades of the old mosque, where a few worshippers repaired that but a single lamp was lighted before the niche at night, and the muëzzin cared to come no further than the threshold to chant the call to prayer, Lāgin vowed that he would repay his preservation by repairing the mosque that had sheltered him; and it is interesting to know that the panels of the pulpit, which, with a cupola over the niche, formed the chief additions (beyond mere repairs) that Lāgin made to the mosque, are now in the South Kensington Museum (figs. 35—8.) Such good deeds, and the magnanimous release of many prisoners, and not least, a bold foreign policy, as when he sent an army to capture towns on the distant borders of Armenia, could not fail to endear him to the populace; and when he was confined to the Citadel for two months with injuries resulting from a fall at polo, the rejoicings on his return to public life were genuine and universal. All the streets were decorated with silks and satins, the shops and windows were hired by sight-seers, eager to catch a glimpse of the Sultan, and drums were beaten during his state progress through the capital. He celebrated the occasion by giving a number of robes of honour to the chief lords, freeing captives, and distributing alms to the poor. His private life commended him to the good Muhammadans of Cairo; for although in his youth he had been a wine-bibber, gambler, and given over to the chase, when he ascended the throne he became austere in his practice, fasted two months in the year besides Ramadān, affected the society of good pious kādīs and

the like, was plain in his dress, as the Prophet ordains that a Muslim should be, and strict in enforcing simplicity among his followers. His ruddy complexion and blue eyes, together with a tall and imposing figure, indeed marked the foreigner, but his habits were orthodoxy itself; he bastinadoed drunkards, even if they were nobles; and his immoderate eating was not necessarily wicked.

But Lāgin, with all his virtues, had a weakness, too common among Mamlūk sovereigns; he was passionately attached to one of his retainers, named Mangūtimūr, and by degrees suffered himself to be led by this favourite where his better judgment would never have allowed him to stray. Mangūtimūr was neither a bad nor a contemptible man; but he was devoured by ambition and pride, and had no scruples when it was a question of removing an obstacle in his path to power. One of these was the great Lord Beysary, who had himself declined the crown, and who, when consulted by Lāgin on the wisdom of making Mangūtimūr his viceroy, reminded the Sultan of his vow when he was elected to the supreme power, and told him in blunt language that Mangūtimūr was not worthy of the honour to which the Sultan destined him. The favourite, when he was made Viceroy after all, did not forget Beysary or his other detractors; some he banished, others were imprisoned and bastinadoed, and Beysary himself was placed in a sort of regal confinement, and there kept till his death. We shall hear more of Lord Beysary when we come to describe his perfume-burner in the chapter on metal-work, and it is enough to say here that he was too much devoted to the comforts and enjoyments of good living to care to trouble himself with the uneasiness which proverbially attends crowned heads. He was moreover an old man, and had been a notable and respected figure in Mamlūk court life for the past fifty years; his arrest was therefore the more wanton. Mangūtimūr's oppressions were not tamely endured by the Amirs; but it was no light thing to risk the horrors of incarceration in the Citadel dungeon, a noisome pit, where foul and deadly exhalations, unclean vermin, and

bats, rendered the pitchy darkness more horrible, and where for nearly half a century it was the practice to incarcerate refractory nobles, until, in 1329, En-Nāsir had the dreaded hole filled up. At length a combination was formed ; Lāgin was treacherously murdered as he was in the act of rising to say the evening prayers, and immediately afterwards Mangutimur was entrapped. He was for the moment consigned to the pit under the Citadel, when the Amir who had dealt the fatal stroke to Lāgin arrived on the scene, and crying with a strident voice, "What had the Sultan done that I should kill him? By God, I never had aught but benefits from him ; he brought me up, and gave me my steps of promotion. Had I known that when the Sultan was dead this Mangutimūr would still be living, I would never have done this murder, for it was Mangutimūr's acts that led me to the deed." So saying, he plunged into the dungeon, slew the hated favourite with his own hands, and delivered his house over to the soldiers to pillage.

This sketch of a few years of Mamlūk history will serve to show the perils that surrounded the kingly state. It is a fair sample of the whole history, although now and again a sovereign would ascend the throne whose personal qualities or diplomatic talents succeeded in keeping the reins of government in his hands for a considerable period. The uncertainty of the tenure of power, and the general brevity of their reigns, (they average about five years and a half,) make it the more astonishing that they should have found time or leisure to promote the many noble works of architecture and engineering, which distinguish their rule above any other period of Egyptian history since the Christian Era. The Sultan's office was indeed no sinecure, apart from the constant watchfulness needed to manage the refractory Mamlūks. Two days a week did Lāgin devote to sitting in the Hall of Justice and hearing any complaints that his subjects might bring before him, in addition to those petitions which were constantly presented to him as he rode through the city. The correspondence of the empire, again,

was no light matter, and most of the Sultans took a personal share in drawing up the despatches. Beybars had established a well organized system of posts, connecting every part of his wide dominions with the capital. Relays of horses were in readiness at each posting-house, and twice a week the Sultan received and answered reports from all parts of the realm. Besides the ordinary mail, there was also a pigeon post, which was no less carefully arranged. The pigeons were kept in cots in the Citadel and at the various stages, which were further apart than those of the horses; the bird knew that it must stop at the first post-cot, where its letter would be attached to the wing of another pigeon for the next stage. The royal pigeons had a distinguishing mark, and when one of these arrived at the Citadel with a despatch, none was permitted to detach the parchment save the Sultan himself; and so stringent were the rules, that were he dining or sleeping or absorbed in polo, he would nevertheless at once be informed of the arrival, and would immediately proceed to disencumber the bird of its message. The correspondence conducted by these posts was often very considerable. Here is an example of the business-hours of the famous Sultan Beybars. He arrived before Tyre one night; a tent was immediately pitched by torchlight, the secretaries, seven in number, were summoned, with the commander-in-chief; and the adjutant-general (Amir 'Alam) with the military secretaries were instructed to draw up orders for drums and standards, &c. For hours they ceased not to write letters and diplomas, to which the Sultan affixed his seal; this very night they indicted in his presence fifty-six diplomas for high nobles, each with its proper introduction of praise to God. One of Beybar's letters has been preserved; it is a very characteristic epistle, and displays a grim and sarcastic appreciation of humour. Boemond, Prince of Antioch, was not present at the assault of that city by Beybars, and the Sultan kindly conveyed the information of the disaster in a personal despatch. He begins by ironically complimenting Boemond on his change of title, from

Prince to Count, in consequence of the fall of his capital, and then goes on to describe the siege and capture of Antioch. He spares his listener no detail of the horrors that ensued: "Hadst thou but seen thy knights trodden under the hoofs of the horses! thy palaces invaded by plunderers and ransacked for booty! thy treasures weighed out by the hundredweight! thy ladies bought and sold with thine own gear, at four for a dinâr! hadst thou but seen thy churches demolished, thy crosses sawn in sunder, thy garbled Gospels hawked about before the sun, the tombs of thy nobles cast to the ground; thy foe the Muslim treading thy Holy of Holies; the monk, the priest, the deacon, slaughtered on the altar; the rich given up to misery; princes of royal blood reduced to slavery! Couldst thou but have seen the flames devouring thy halls; thy dead cast into the fires temporal, with the fires eternal hard at hand! the churches of Paul and of Cosmas rocking and going down!—then wouldst thou have said, 'Would God that I were dust! Would God that I never had this letter!' . . . This letter holds happy tidings for thee: it tells thee that God watches over thee, to prolong thy days, inasmuch as in these latter days thou wert not in Antioch! Hadst thou been there, now wouldst thou be slain or a prisoner, wounded or disabled. A live man rejoiceth in his safety when he looketh on a field of slain. . . . As not a man hath escaped to tell thee the tale, we tell it thee; as no soul could apprise thee that thou art safe, while all the rest have perished, we apprise thee!" Nevertheless, Boemond was mightily incensed with the Sultan's sarcastic attentions.*

Beybars was exceptionally active in the discharge of his royal functions, and was indefatigable in making personal inspections of the forts and defences of his empire. Once he left his camp secretly, and made a minute inspection of his kingdom in disguise,

* The greater part of the translation above is Col. Yule's (*Marco Polo*, i. 25): the Arabic text and French version are given by Quatremère, in El-Makrizy's *Histoire des Sultans Mamlouks*, I. ii. 190—194.

returning before his absence had been found out by his troops. He maintained 12,000 soldiers under arms, of whom a third were stationed in Egypt, a third at Damascus, and the remaining third at Aleppo. On his expeditions he was escorted by 4000 horsemen. His history is a good example of the adventurous career of the Mamlūk. He was a native of Kipchak, between the Caspian and the Ural Mountains,—a tall, ruddy fellow, with blue eyes, one of which had a cataract on it, and this defect nearly lost him a purchaser in the slave-market : indeed, he only fetched 800 francs, a sum hardly equal to £20. He was afterwards bought by the Amir 'Alā-ed-dīn Aydekin, El-Bundukdār, "the Arblasteer," from whom Beybars took his title El-Bundukdāry, or "Bendocquedar," as Marco Polo writes it. Subsequently he passed into the possession of Es-Sālih Ayyūb, and his strong, determined nature, his promptitude and resource in action, high mettle, and resonant voice, soon gained him the admiration and fear of his contemporaries. His charge at Mansūra won the day and annihilated the crusade of St. Louis, and in due course he made his way to the throne, through, we are sorry to add, the usual road of assassination. His was not a scrupulous nature, and his own death was caused by poison which he had prepared for another ; but he was the first great Mamlūk Sultan, and the right man to lay the foundations of the empire. "Bondogar," says William of Tripoli, "as a soldier was not inferior to Julius Caesar, nor in malignity to Nero;" but he allows that the Sultan was "sober, chaste, just to his own people, and even kind to his Christian subjects."* So well did he organize his wide-stretching provinces that no incapacity or disunion among his successors could pull down the fabric he had raised, until the wave of Ottoman conquest swept at last upon Egypt and Syria. To him is due the constitution of the Mamlūk army, the rebuilding of a navy of 40 war-galleys, the allotment of fiefs to the lords and soldiers,

* Col. H. Yule, *Marco Polo*, i. 24.

the building of causeways and bridges, and digging of canals in various parts of Egypt. He strengthened the fortresses of Syria and garrisoned them with Mamlûks; he connected Damascus and Cairo by a postal service of four days, and used to play polo in both cities within the same week. His mosque still stands without the north gates, and his college till lately formed an important feature among the splendid monuments in the street known as "Betwixt the Palaces;" he founded an endowment for the burial of poor Muslims; in short, he was the best ruler Egypt had seen since the death of Saladin, whom he resembled in many respects, but not in chivalrous clemency. Some idea of the luxury and refinement of his court may be gathered from the list of his presents to the Persian Ilkhân Baraka, which included a Korân, said to have been transcribed by the Khalif 'Othmân, enclosed in a case of red silk embroidered with gold, over which was a leather cover lined with striped silk; a throne encrusted with carved ivory and ebony; a silver chest; prayer-carpets of all colours and sorts; curtains, cushions, and tables; superb swords with silver hilts; instruments of music of painted wood; silver lamps and chandeliers; saddles from Khwârizm, bows from Damascus, with silk strings; pikes of Kana wood, with points tempered by the Arabs; exquisitely fashioned arrows in boxes plated with copper; large lamps of enamel with silver-gilt chains; black eunuchs, ingenious cook-girls, beautiful parrots; numbers of Arab horses, dromedaries, mules, wild asses, giraffes, and apes, with all kinds of saddles and trappings. Only remarkable qualities could have raised Beybars from the condition of a one-eyed slave to the founder of an empire that endured for nearly three centuries.

In addition to necessary business, state ceremonies occupied no inconsiderable part of the Sultan's time. The Mamlûk court was a minutely organized system, and the choice of officers to fill the numerous posts of the household, and the tact demanded in satisfying their jealousies and disagreements, to say nothing

of the constant presentation of ceremonial dresses of honour, writing of diplomas, and granting of titles and appanages, must have been a tax upon their master. The posts about the royal person were no sinecures, and it needed no doubt some diplomacy to arrange the cabinet and household appointments to the satisfaction of everybody. The chief officers of the court, which of course included the administration, were these :—

1. The *Nāib-es-Saltana*, or Viceroy, chief officer of the empire, corresponding to the Vizir of other periods, who controlled alike the army, finances, posts, and appointments; rode at the head of the troops in state progresses, and was escorted by nobles to and from the Sultan's presence. He was styled *Melik el-Umara*, or "King of Nobles," and had a special palace (*Dār-en-Niāba*) in the Citadel, where all the functionaries of the state came to him for instructions.

2. The *Atābek*, or *Atābek-el-asākir*, Commander-in-Chief, also styled (after the middle of the fourteenth century) *El-Amir-el-Kebīr*, or "the Great Lord."

3. The *Ustaddar*, Majordomo, superintendent of the household, the kitchen, pages (*ujāks*), and servants and officers generally; he had entire authority to obtain the supplies, money, and clothing for the royal household. By the time of Barkūk, A.D. 1400, this official had so waxed in importance, that he had become practically Grand Vizir, and enjoyed the management of the finances and the royal domains. His military rank—for all Mamlūks, though their posts might be purely civil, had military grades—was that of Bicenturion, or Major over 200. Under him were servants supplied from among the Lords of the Drums and Captains over Ten, and he had a legal assessor and *mubāshirs*, or superintendents, to assist him.

4. The *Rās Nauba*, or Chief of the Guard, commanded the Sultan's Mamlūks, and settled their differences. Another and superior *Rās Nauba* commanded the Lords and adjusted their quarrels, and the latter was not only addressed as "His

Excellency the Generous the Exalted," الجنب العالی الکرم, but the Sultan called him "Brother."*

5, 6. The *Silāhdār*, Armour-bearer, carried the Sultan's armour. There were several, and their chief was called *Amīr Silāh*, "Lord of the Arms," who inspected the Armoury, was a centurion or Captain over 100, and was addressed by the Sultan as "Brother," with the same style as the *Rās Naubat el-Umara*. The Lord of the Arms was one of the highest officers in the realm after the *Atābek Amīr el-Kebīr*.

7. The *Amīr Akhōr*, Master of the Horse, presided over the royal stables, assisted by the *Selākhōry*, who saw to the horses' food, and sometimes by a second *Amīr Akhōr*, who was a Captain over Ten; minor equeries superintended the colts, oxen, water-wheels, &c., separately, but all were under the supreme control of the great Master of the Horse.

8, 9. The *Sāky*, Cup-bearer, and the *Gāshenkīr*, Taster, whose duty it was to taste the Sultan's food before it was served, to ward against poison, were officers of trust, and enjoyed frequent intercourse with the sovereign, and thus often carried great influence in the management of the empire. The *Gāshenkīr* was a Bicenturion.

10. The *Hāgib*, Chamberlain, was the officer who guarded the access to the royal presence.

11. *Amīr Gandār*, Equerry-in-waiting, introduced nobles to the presence, and commanded the *gandārs* or equeries, and *berd-dars*, grooms of the bedchamber; superintended the executions and tortures by order of the Sultan, and had charge of the *sardkhānāh*, or royal prison. He was chosen from the ranks of the Colonels (*mukaddam*) or Lords of the Drums.

12. The *Dawādār*, or Secretary, took charge of the imperial

* The Sultan never forgot that he had risen from the ranks of the Mamlūks, and was accustomed to address his late comrades in brotherly style. "The Mamlūk" was a common title much esteemed by the Sultan and retained in the days of his greatest power.

correspondence, received and addressed despatches, was a Lord of the Drums, or a Captain over Ten, and enjoyed great influence and consideration.

13. The *Kātim es-Sirr*, or Private Secretary, was the depository of the Sultan's secret affairs, shared the correspondence with the *Dawādār*, was the first to go in to the sovereign and the last to come out, and was his chief adviser in all matters.

Besides these great officers, there were many smaller posts, which often commanded great power and influence. The *Amir Meglis*, Lord of the Seat, so called because he enjoyed the privilege of sitting in the Sultan's presence, was the superintendent of the court physicians and surgeons; the *Gamdār*, or Master of the Wardrobe, was a high official; the *Amir Shikār*, or Grand Huntsman, assisted the king in the chase; the *Amir Tabar*, or Drum-Major, held almost the rank of the Chief of the Guard, and commanded the *Tabardārs* or Halbardiers of the Sultan, ten in number; the *Bashmakdār* carried the sovereign's slippers; the *Gūkandār* bore the Sultan's polo-stick, a staff of painted wood about four cubits long, with a curved head; the *Zimamdārs* were eunuch guards. The various household departments had also their officers, who were often great nobles, and men of influence in the realm. The *Ustaddār-es-Sukba* presided over the cookery; the *Tabl-khānāh*, or Drummery, was the department where the royal band was kept, and it was presided over by an officer called the *Amir 'Alam*, or adjutant-general. The Sultan's band is stated at one time to have comprised four drums, forty kettle-drums (كوبات), four hautbois (زبور), and twenty trumpets (نعير). The permission to have a band was among the most coveted distinctions of Mamlūk times, and those Lords who were allowed to have a band playing before their gates were styled *Amir Tabl-khānāh*, or Lord of the Drums; they were about thirty in number, and each had command of a body of forty horsemen, with a band of ten drums, two hautbois, and four trumpets, and an appanage of

about the value of 30,000 dinārs. The practice of employing these ceremonial bands went out with the Turkish conquest.

Then there was the *Tisht-khānāh*, or Vestuary, where the royal robes, jewels, seals, swords, &c., were kept, and where his clothes were washed. The servants of the *Tisht-khānāh* were called *tishtdārs*, or grooms of the wardrobe, and *rakhtwānis*, or grooms of the chamber, under the command of two *mihtārs*, or superintendents. The *Sharāb-khānāh*, or Buttery, where were stored the liquors, sweetmeats, fruits, cordials, perfumes, and water for the sovereign, was also managed by two *mihtārs*, aided by a number of *sharāb-dārs*, or buttery-men; the *Hawāig-khānāh*, or Larder, where the food and vegetables required for the day were prepared, was under the superintendence of the *Hawāig-kāsh*. At the time of Ketbugha the daily amount of food prepared here was 20,000 pounds, and under En-Nāsir the daily cost of the larder was from 21,000 to 30,000 francs. The *Rikāb-khānāh*, or Harness-room, and *Firāsh-khānāh*, or Lumber-room, had also their staff of officials. And besides the household and military officers, there were the various judicial officers, *Kādīs* and the like, and the police authorities, to be appointed by the Sultan; such were the *Wāly*, or chief magistrate of Cairo, who kept order in the city, commanded the patrols, inspected the prisons, opened and shut the city gates, and was obliged always to sleep in Cairo; the *shādds* and *mushidds*, inspectors in their various departments, and the *muhtesib*, the important officer who corrected the weights and measures in the markets, and guarded public morals.

It will be seen that court life was complicated even in the fourteenth century, and the state ceremonies of a Mamlūk Sultan must have involved as much etiquette as any modern levée, and presented a much more splendid spectacle. When the Sultan rode abroad in state, to hold a review or to make a progress through his dominions, the composition of his escort was elaborately ordered. The Sultan Beybars, for example, rode in the centre, dressed in a black silk *gubba*, or vest with large sleeves, but without embroidery

or gold ; on his head was a turban of fine silk, with a pendant hanging between his shoulders ; and a Bedawy sword swung by his side, and a Dawūdy cuirass was concealed beneath his vest. In front, a great lord carried the *Ghāshia*, or royal saddle-cloth, emblem of sovereignty, covered with gold and precious stones ; and over his head, a Prince of the Blood, or the Commander-in-chief, bore the state parasol, made of yellow silk, embroidered with gold, and crowned with a golden bird perched upon a golden cupola. The housing of his horse's neck was yellow silk embroidered with gold, and a *sunnāry* or cloth of red atlas satin covered the crupper. The royal standard of silk and gold thread was borne aloft, and the troops had their regimental colours of yellow Cairene silk, embroidered with the escutcheons of their leaders. Just before the Sultan rode two pages on white horses, with rich trappings ; their robes were of yellow silk with borders of gold brocade, and a kuffiya of the same : it was their duty to see that the road was sound. A flute-player went before, and a singer followed after, chanting the heroic deeds of former kings, to the accompaniment of a hand-drum ; poets sang verses antiphonally, accompanying themselves with the kemenga and mōsil. Tabardārs carried halberts before and behind the Sultan, and the state poniards were supported by the polo-master (*gūkandār*) in a scabbard on the left, while another dagger with a buckler was carried on the monarch's right. Close beside him rode the *Gamak-dār*, or Mace-bearer, a tall, handsome man, who carried the gold-headed mace aloft, and never withdrew his eyes from the countenance of his master. The great officers of the court followed with little less pomp. When a halt was called for the night, on long journeys, torches were borne before the Sultan, and as he approached the tent, which had gone on in front and been pitched before his arrival, his servants came to meet him with wax candles in stands inlaid with gold ; pages and halbardiers surrounded him, the soldiers sang a chorus, and all dismounted except the Sultan, who rode into the vestibule of the tent, where he left his

horse, and then entered the great round pavilion behind it. Out of this opened a little wooden bed-room, warmer than the tent, and a bath with heating materials was at hand. The whole was surrounded by a wall, and the Mamlûks mounted guard in regular watches, inspected periodically by visiting rounds, with grand rounds twice in the night. The *Amir Bâbdâr*, or Grand Door-keeper, commanded the grand rounds. Servants and eunuchs slept at the door.*

The historian of the Mamlûks is fond of telling how the Sultan made his progresses, held reviews of his troops, led a charge in battle, or joined in the games at home. The Mamlûks were ardent votaries of sport and athletic exercises. En-Nâsir was devoted to the chase, and imported numbers of sunkurs, sakrs, falcons, hawks, and other birds of prey, and would present valuable fcofs to his falconers, who rode beside him hawk on wrist. Beybars was a keen archer, and a skilful hand at making arrows. He erected an archery-ground outside the Gate of Victory at Cairo, and here he would stay from noon till sunset, encouraging the Amirs in their practice. The pursuit of archery became the chief occupation of the lords of his court. But Beybars, like most of the Mamlûks, was catholic in his tastes; he was fond of racing horses; spent two days in the week at polo; was famous

* Joinville describes the Sultan Beybars' camp at Damietta: It was entered through a tower of fir-poles covered round with coloured stuff, and inside was the tent where the lords left their weapons when they sought audience of the Sultan. "Behind this tent there was a doorway similar to the first, by which you entered a large tent, which was the Sultan's hall. Behind the hall there was a tower like the one in front, through which you entered the Sultan's chamber. Behind the Sultan's chamber there was an enclosed space, and in the centre of this enclosure a tower, loftier than all the others, from which the Sultan looked out over the whole camp and country. From the enclosure a pathway went down to the river, to the spot where the Sultan had spread a tent over the water for the purpose of bathing. The whole of this encampment was enclosed within a trellis of wood-work, and on the outer side the trellises were spread with blue calico (?) . . . and the four towers were also covered with calico." Hutton's trans. p. 94.

for his management of the lance in the tournaments which formed one of the amusements of the day; and was so good a swimmer, that he once swam across the Nile in his cuirass, dragging after him several great nobles seated on carpets. Such outward details of the life of the Mamlûks may be gathered from the pages of El-Makrizy and other historians. But if we seek to know something of the domestic life of the period, we must go elsewhere than to these sources. We find indeed occasionally in El-Makrizy an account of the revels of the court on great festivals, and he tells us how during some festivities in Beybars' reign there was a concert every night in the Citadel, where a torch was gently waved to and fro to keep the time. But to understand the home-life of the Mamlûks, we must turn to the *Thousand and One Nights*, where, whatever the origin and scene of the stories, the manners and customs are drawn from the society which the narrators saw about them in Cairo in the days of the Mamlûks. From the doings of the characters in that immortal story-book, we may form a nearly accurate idea of how the Mamlûks amused themselves; and the various articles of luxury that have come down to us, the goblets, incense-burners, bowls, and dishes of fine inlaid silver and gold, go to confirm the fidelity of the picture. The wonderful thing about this old Mohammadan society is that it was what it was in spite of Islâm. With all their prayers and fasts and irritating ritual, the Muslims of the Middle Ages contrived to amuse themselves. Even in their religion they found opportunities for enjoyment. They made the most of the festivals of the Faith, and put on their best clothes; they made up parties—to visit the tombs, indeed, but to visit them right merrily on the backs of their asses;* they let their servants go out and amuse themselves too in the gaily illuminated streets, hung with silk and satin, and filled with dancers, jugglers, and revellers, fantastic figures, the Oriental

* Nâsir i-Khusrau (eleventh century) says that 50,000 donkeys were on hire at Cairo in his time. They stood at street-corners, with gay saddles, and everybody rode them.

Punch, and the Chinese Shadows; or they went to witness the thrilling and horrifying performances of the dervishes. There was excitement to be derived from the very creed; for did they not believe in those wonderful creatures the Ginn, who dwelt in the Mountains of Kāf, near the mysterious Sea of Darkness, where Khidr drank of the Fountain of Life? And who could tell when he might come across one of these awful beings, incarnate in the form of a jackal or a serpent; or meet, in his own hideous shape, the appalling Nemās, who is a man split in two, with half a head, half a body, one arm and one leg, and yet hops along with astonishing agility, and is said, when caught, to have been found very sweet eating by the people of Hadramaut? To live among such fancies must have given a relish to life, even when one knew that one's destiny was inscribed in the sutures of the skull, and in spite of those ascetic souls who found consolation in staring at a blank wall until they saw the name of Allah blazing on it.

What society was like at the time of the first Mamlūks may be gathered very clearly from the poems* of Behā-ed-din Zuheyr, the secretary of Es-Sālih Ayyūb, who survived his master and died in 1258. The Egyptians of his acquaintance, as reflected in his graceful verse, seem to have resembled our own latter-day friends in their pleasures and passions. Love is the great theme of Zuheyr as well as Swinburne; the poet waxes eloquent over a long succession of mistresses, blonde and brown, constant and fickle, kind and coy,—

" Like the line of beauty her waving curl,
Her stature like the lance."

We read of stolen interviews, in despite of parents and guardians, maidens "waiting at the tryst alone," and various other breaches of Mohammadan morals. If Zuheyr fairly represented his

* Admirably translated by the late Prof. E. H. Palmer. (Cambridge, 1877.)

time, life at Cairo in the thirteenth century was not without its savour :—

Well ! the night of youth is over, and grey-headed morn is near ;
 Fare ye well, ye tender meetings with the friends I held so dear !
 O'er my life these silvery locks are shedding an unwonted light,
 And revealing many follies youth had hidden out of sight.
 Yet though age is stealing o'er me, still I love the festive throng,
 Still I love a pleasant fellow, and a pleasant merry song ;
 Still I love the ancient tryst, though the trysting time is o'er,
 And the tender maid that ne'er may yield to my caresses more ;
 Still I love the sparkling wine-cup, which the saucy maidens fill, &c.

The wine-cup plays a prominent part in Zuheyr's catalogue of the joys of life, and he is full of contempt for the prudent mentor who reproved him :—

Let us, friends, carouse and revel,
 And send the mentor to the devil !

The great indoor amusement of the mediaeval Muslim was feasting. The Arabs indeed never understood scientific gastronomy ; they coarsely drank to get drunk, and ate to get full. We read of a public banquet (under the Fātimis, but probably equalled many a time in the Mamlūk period), where the table was covered with 21 enormous dishes, each containing 21 baked sheep, three years old and fat, and 350 pigeons and fowls, all piled up together to the height of a man, and covered in with dried sweetmeats. Between these dishes were 500 smaller ones, each holding seven fowls and the usual complement of confectionery. The table was strewn with flowers and cakes of bread, and two grand edifices of sweetmeats, each weighing 17 cwt., were brought in on shoulder-poles. On such occasions a man might eat a sheep or two without being remarkable. But if he ate somewhat heartily, he did not omit to wash it down afterwards with plenty of wine, despite all the ordinances of the Prophet. If the bowls that have descended to us were drinking-cups, the Mamlūk thought very little of a pint stoup. Like our own Norse and Saxon ancestors, he loved his wassail, and took it right jovially, until he found himself under the table, or would

have done so had there been any tables of the right sort. Zuheyr sings:—

Here, take it, 'tis empty ! and fill it again
 With wine that's grown old in the wood ;
 That in its proprietor's cellars has lain
 So long that at least it goes back to the reign
 Of the famous Nushirwan the Good—

With wine which the jovial friars of old
 Have carefully laid up in store,
 In readiness there for their feast-days to hold—
 With liquor, of which if a man were but *told*,
 He'd roll away drunk from the door !

Many of the Mamlūk Sultans are described as being addicted to wine, and the great Lord Beysary was at one time stated to be incapable of taking part in affairs, because he was entirely given over to drink and hazard. Yet there are redeeming points in this sottishness. The Muslims of the days of good Harūn, and not less of the other "golden prime" of Beybars and Barkūk, did not take their wine moodily or in solitude. They loved to have a jovial company round them, and plenty of flowers and sweet scents on the board ; they scented their beards with civet, and sprinkled their beautiful robes with rose-water, while ambergris and frankincense, burned in the censers we still possess, diffused a delicious perfume through the room. Nor was the feast complete without music and the voices of singing women. A ravishing slave-girl, with a form like the waving willow, and a face as resplendent as the moon, sang soft, sad Arabian melodies to the accompaniment of the lute, till the guests rolled over in ecstasy. Other and less refined performances, the alluring gestures of the dancing-girls, the coarse feats of Punch or the hired buffoon, also enlivened the evening ; and the ladies of the Harim would share the pleasures of the men, separated by a lattice screen, or hidden behind gorgeously embroidered curtains. We shall see presently what palaces the Mamlūks built for themselves, how they hung them with rich stuffs, and strewed them with costly carpets ; what wealth of carving and ivory-work em-

bellished their doors and ceilings ; how gloriously inlaid were their drinking and washing vessels, how softly rich the colouring of their stained windows. The Mamlûks offer the most singular contrasts of any series of princes in the world. A band of lawless adventurers, slaves in origin, butchers by choice, turbulent, blood-thirsty, and too often treacherous, these slave kings had a keen appreciation for the arts which would have done credit to the most civilized ruler that ever sat on a constitutional throne. Their morals were indifferent, their conduct was violent and unscrupulous, yet they show in their buildings, their decoration, their dress, and their furniture, a taste which it would be hard to parallel in Western countries even in the present age of enlightenment. It is one of the most singular facts in Eastern history, that wherever these rude Tartars penetrated, there they inspired a fresh and vivid enthusiasm for art. It was the Tartar Ibn-Tûlûn who built the first example of the true Saracenic mosque at Cairo ; it was the line of Mamlûk Sultans, all Turkish or Circassian slaves, who filled Cairo with the most beautiful and abundant monuments that any city can show. The arts were in Egypt long before the Tartars became her rulers, but they stirred them into new life, and made the Saracenic work of Egypt the centre and head-piece of Mohammadan art.

The following tables will supply the necessary chronological details and the chief events and monuments of each reign. It should be noticed that a certain stability and duration of authority was necessary even among the Mamlûks to allow opportunity for artistic effort. The great monuments now standing of the Mamlûk Sultans are grouped about 9 Sultans : 4 of the Bahris, and 5 of the Burgis. But the reigns of these 9 Sultans amounted together to two-thirds of the whole period occupied by the 49 Mamlûk rulers. The reigns of Beybars I. (18 years), Kalaûn (11), En-Nâsir (42), and Sultan Hasan (11) ; of Barkûk (16), El-Muayyad (9), El-Ashraf Bars Bey (17), Kait Bey (28), and El-Ghûry (16),

make a total of 168 years, out of 266, leaving but 98 years for the remaining 40 Sultans. The great Mamlūk builders had thus an average reign of nearly 19 years, while those who have left no signal monuments average only $2\frac{1}{2}$ years. Beybars Jāshenkir, however, is perhaps an exception; for he has left a beautiful mosque and many restorations, yet he ruled as Sultan for but a single year.

THE SARACEN RULERS OF EGYPT.

A.H. 21—926 = A.D. 641—1517.

I.—GOVERNORS APPOINTED BY THE KHALIFS.

A.H.	A.D.	Ruler.	Events and existing Monuments.
21 to 254	641 to 868	The list of 98 Governors, to whom no distinctive work of art can be ascribed, is omitted. (Cp. Wüstenfeld, <i>Die Statthalter d. Egyptens unter den Khalifen</i> .)	Conquest of Egypt completed, 21 A.H. <i>Mosque of 'Amr</i> , 21 A.H., but frequently restored. City of El-Fustāṭ, A.H. 21, and suburb of El-'Askar, A.H. 133.

II.—HOUSE OF TŪLŪN.

254	868	Aḥmad ibn Tūlūn	Suburb of El-Kāṭai', 256. <i>Mosque of Ibn-Tūlūn</i> , 263-5. Annexation of Syria as far as Aleppo, 264.
270	883	Khumāraweyh (son of Aḥmad)	
282	895	Geysh Abu-l-Asākir } (sons of Khumāraweyh)	
283	896	Hārūn }	
292	904	Sheybān (son of Aḥmad)	

III.—SECOND LINE OF GOVERNORS.

292 to 323	905 to 934	Thirteen Governors.	{ Partial burning of El-Kāṭai', 292. Invasion of Egypt by El-Mahdy the Fāṭimy, 307.
------------------	------------------	---------------------	--

IV.—HOUSE OF IKHSHĪD.

A.H.	A.D.	Ruler.	Events and existing Monuments.
323	934	Mohammad El-Ikshīd Ibn Tukg'	Syria again annexed. The kings of this dynasty were buried at Damascus, and have therefore left no tomb-mosques in Egypt.
334	946	Abu-l-Kāsim Ūngūr (son of El-Ikshīd)	
349	960	Abu-l-Ḥasan 'Aly (son of El-Ikshīd)	
355	966	Abu-l-Misk Kāfūr, a Eunuch	
357 to 358	968 969	Abu-l-Fawāris Aḥmad (son of 'Aly)	

V.—FĀṬIMY KHALIFS.

A.—IN TUNIS.

297	909	El-Mahdy 'Obeyd-Allah	Invades Egypt, 307.
322	934	El-Kāsim Moḥammad	
334	945	El-Manṣūr Ismā'īl	
341	952	El-Ma'izz Ma'add	

B.—IN EGYPT.

358	969	" "	Conquest of Egypt, 358. Syria and part of Arabia annexed. Foundation of El-Kāhira (Cairo). <i>Mosque El-Azhar</i> , 359-61. Invasions of the Karmatis. Conversion of the Azhar into a University. <i>Mosque of El-Ḥakim</i> , 380. Founder of the Druse sect. <i>Mosque of El-Ḥakim completed</i> , 403. Loss of Aleppo.
365	975	El-'Azīz Nizār	Great famine, 7 years long, which caused the desertion and decay of El-Fustāt and other parts of the capital.
386	996	El-Ḥakim El-Manṣūr	<i>Restoration of Mosque of 'Amr</i> , 441-2. <i>The 3 great Gates and 2nd wall of Cairo built</i> .
411 427	1020 1035	Edh-Dhāhir 'Aly El-Mustanṣir Ma'add	Usurpation of Nāṣir-ed-dawleh, 462-5. First Crusade; loss of Jerusalem. Further losses in Syria.
487 495 524	1094 1101 1130	El-Musta'ly Aḥmad El-ʿAmir El-Manṣūr El-Ḥāḍir 'Abd-el-Megīd	Nūr-ed-dīn Ibn Zenky makes himself master of Aleppo and Damascus.
544 549	1149 1154	Edh-Dhāfir Ismā'īl El-Fāiz 'Isā	

A.H.	A.D.	Ruler.	Events and existing Monuments.
555 to 567	1160 to 1171	El-'Adid 'Abd.-Allah	Nūr-ed-dīn's expeditions to Egypt, 559, 561. Saladin in Egypt, 561. Burning of El-Fustāt, 564, for fifty days, to save its falling into the hands of Amaury, Christian King of Jerusalem.

VI.—HOUSE OF AYYŪB.

(EGYPTIAN BRANCH.)

567	1173	En-Nāṣir Salāh-ed-dīn [Saladin] Yūsuf ibn Ayyūb	From 567-9 owns homage to Nūr-ed-dīn. Annexation of Syria, 570. Crusades. <i>Citadel and 3rd Wall of Cairo.</i> <i>Restoration of Mosque of 'Amr.</i>
589	1193	El-'Azīz 'Imād-ed-dīn 'Othmān	Resists 4th Crusade. Syria separated.
595	1198	El-Mansūr Moḥammad	
596	1199	El-'Adil Seyf-ed-dīn Abu-Bekr ibn Ayyūb	Reannexes Syria.
615	1218	El-Kāmil Moḥammad	Defeat of Jean de Brienne. <i>Tomb of Es-Salāḥīy, 608.</i> Jerusalem ceded to Frederick II., 626.
635 637	1238 1240	El-'Adil Seyf-ed-dīn Abu-Bekr II. Es-Ṣalīḥ Negm-ed-dīn Ayyūb	Jerusalem recaptured. Crusade of St. Louis. <i>College Es-Ṣalīḥīya, 641.</i> Castle of Er-Rōda.
647	1249	El-Mu'aqḥḥam Tūrān Shāh	Defeat and capture of St. Louis at Mansūra, 647. <i>Tomb Mosque of Es-Salīḥ, 647.</i>
648 to 650	1250 to 1252	El-Ashraf Mūsā (nominally joint king with the Mamlūk Sultān Aybek)	

VII.—THE MAMLŪK SULTĀNS.

A.—BAHRY OR TURKISH LINE.

648	1250	Queen Sheger-ed-durr	Syria separated.
648	1250	El-Mu'izz 'Izz-ed dīn Aybek	
655	1257	El-Manṣūr Nūr-ed-dīn 'Alī	War with Hūlāgū the Mongol. Syria annexed. Antioch taken.
657	1259	El-Muḍḥaffar Seyf-ed-dīn Ḳuṭuz	

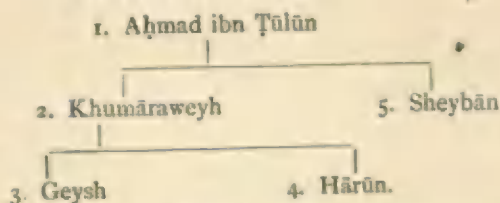
A.H.	A.D.	Ruler.	Events and existing Monuments.
658	1260	Eḡh-Dhāhir Rukn-ed-dīn Beybars I.	Campaigns against the Mongols and Christians. <i>Mosque of Eḡh-Dhāhir</i> , 665-7. <i>Collegiate Mosque Eḡh-Dhāhiriya</i> , 660.
676	1277	Es-Sa'īd Nāṣir-ed-dīn Baraka Khān	
678	1279	El-'Adil Bedr-ed-dīn Selāmish	
678	1279	El-Mansūr Seyf-ed-dīn Kalāūn	<i>Mosque of Kalāūn, Māristān or Hospital</i> , 683. Campaign in Syria; sack of Tripoli. Capture of Acre, 690.
689	1290	El-Ashraf Ṣalāḥ-ed-dīn Khalīl	
693	1293	En-Nāṣir Nāṣir-ed-dīn Moḥammad. 1st reign	
694	1294	El-'Adil Zayn-ed-dīn Ketbughā	
696	1296	El-Manṣūr Ḥusām-ed-dīn Lāḡīn	
698	1299	En-Nāṣir Moḥammad. 2nd reign	<i>Restoration of Mosque of Ibn-Tūlūn</i> . Defeat of Mongols in Syria. <i>Collegiate Mosque En-Nāṣiriya</i> , 698—703.
708	1309	El-Muḡhaḡgar Rukn-ed-dīn Beybars II.	<i>Monastic Mosque of Berybars</i> , 706.
709	1310	En-Nāṣir Moḥammad. 3rd reign	<i>Mosque of En-Nāṣir in citadel</i> , 718. Persecutions of Christians and destruction of churches. <i>Mosques of the Amīrs Kūṣūn</i> , 730; <i>El-Māridīṭay</i> , 738-40; <i>Singar</i> <i>El-Gawaly and Salār</i> , 723 ff.
741	1341	El-Mansūr Seyf-ed-dīn Abū-Bekr	
742	1341	El-Ashraf 'Alā-ed-dīn Kūḡūḡ	
742	1342	En-Nāṣir Shihāb-ed-dīn Aḡmad	
743	1342	Es-Ṣalīḡ 'Imād-ed-dīn Ismā'īl	
746	1345	El-Kāmil Seyf-ed-dīn Sha'bān	
747	1346	El-Muḡhaḡgar Seyf-ed-dīn Ḥāḡḡy	<i>Mosque of the Amīr Aḡsunḡur</i> , 747-8.
748	1347	En-Nāṣir Nāṣir-ed-dīn Ḥasan. 1st reign	
752	1351	Es-Ṣalīḡ Ṣalāḥ-ed-dīn Ṣalīḡ	
755	1354	En-Nāṣir Ḥasan. 2nd reign	<i>Mosque of Sulṭān Ḥasan</i> , 757-60. <i>Mosques of the Amīrs Shayḡḡhū</i> , 756, and <i>Suyurgḡhatmīsh</i> , 757.
762	1361	El-Manṣūr Ṣalāḥ-ed-dīn Moḥammad	
764	1363	El-Ashraf Nāṣir-ed-dīn Sha'bān	<i>Mosque of Umm-Sha'bān</i> .
778	1377	El-Manṣūr 'Alā-ed-dīn 'Alī	
783	1381	Es-Ṣalīḡ Ṣalāḥ-ed-dīn Ḥāḡḡy deposed by Barḡūḡ 784 (1382, but restored, 791, with new title of El-Manṣūr Ḥāḡḡy, and finally deposed by Barḡūḡ, 792.	
to	to		
792	1390		

B.—BURGY OR CIRCASSIAN LINE.

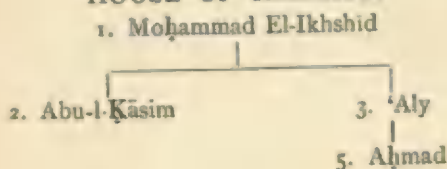
A. H.	A. D.	Ruler.	Events and existing Monuments.
784	1382	Eḡh-Dhāhir Seyf-ed-dīn Barḡūḡ (interrupted by Ḥaggy, 791-2)	<i>Tomb Mosque of Barḡūḡ.</i> <i>Collegiate Mosque Barḡūḡiyya, 786.</i> War with Timūr (Tamerlane).
801	1399	En-Nāṣir Nāṣir-ed-dīn Farag. <i>1st reign</i>	Peace concluded with Timūr.
808	1405	El-Manṣūr 'Izz-ed-dīn 'Abd-el- 'Aziz	
809	1406	En-Nāṣir Farag. <i>2nd reign</i>	
815	1412	El-'Ādil El-Musta'in (the Khalif)	
815	1412	El-Mu'ayyad Shaykh	<i>Mosque of El-Mu'ayyad, 818-23.</i> Campaigns in Syria.
824	1421	El-Muḡhaḡḡar Aḡmad	
824	1421	Eḡh-Dhāhir Seyf-ed-dīn Taṭār	
824	1421	Eḡ-Ṣalīḡ Nāṣir-ed-dīn Moḡammad	
825	1422	El-Aḡraf Seyf-ed-dīn Bars Bey	<i>Collegiate Mosque El-Aḡrafiyya,</i> <i>827.</i> <i>Tomb Mosque of Bars Bey.</i> Expedition against John, King of Cyprus, 827.
842	1438	El-'Aziz Jemāl-ed-dīn Yūsuf	
842	1438	Eḡh-Dhāhir Seyf-ed-dīn Gaḡmaḡ	
857	1453	El-Manṣūr Fakḡr-ed-dīn 'Oḡmān	
857	1453	El-Aḡraf Seyf-ed-dīn Ināl	
865	1461	El-Mu'ayyad Shihāb-ed-dīn Aḡmad	
865	1461	Eḡh-Dhāhir Seyf-ed-dīn Khōsh- kadam	
872	1467	Eḡh-Dhāhir Seyf-ed-dīn Bīlbāy	
872	1467	Eḡh-Dhāhir Temerbughā	
873	1468	El-Aḡraf Seyf-ed-dīn Kāit Bey	<i>Mosque of Kāit Bey (intra muros).</i> <i>Tomb Mosque of Kāit Bey.</i> <i>Wekāla of Kāit Bey.</i> War with the Ottoman Turks, who were repeatedly defeated.
901	1496	En-Nāṣir Moḡammad	
904	1498	Eḡh-Dhāhir Kānṣūḡ	
905	1500	El-Aḡraf Gānbalāt	<i>Mosque of the Amīr Esbek, 905.</i>
906	1501	El-'Ādil Tūmān Bey	
906	1501	El-Aḡraf Kānṣūḡ El-Gḡory	<i>Mosque and Tomb Mosque Ghōriyya,</i> <i>909.</i> Battle of Marg-Dābīk, and defeat of Mamlūks by Selīm I. Invasion of Egypt.
922	1516	El-Aḡraf Tūmān Bey	
922	1516	Egypt annexed by the Ottoman Sultān Selīm.	

GENEALOGICAL TREES OF THE FAMILIES REIGNING IN EGYPT.

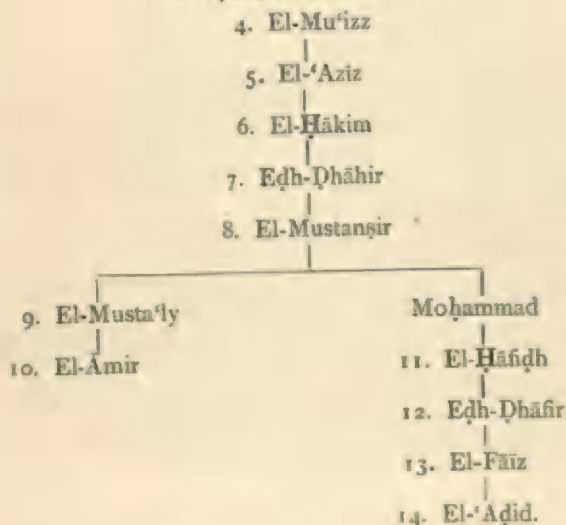
HOUSE OF TŪLŪN.



HOUSE OF IKHSHĪD.

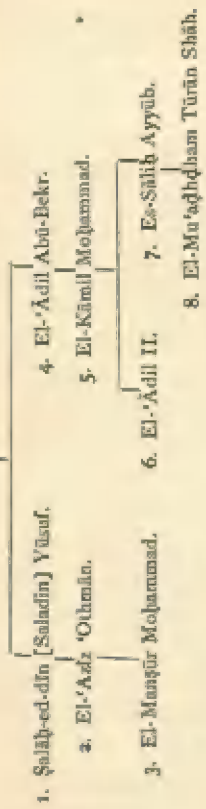


FĀṬIMY KHALIFS.



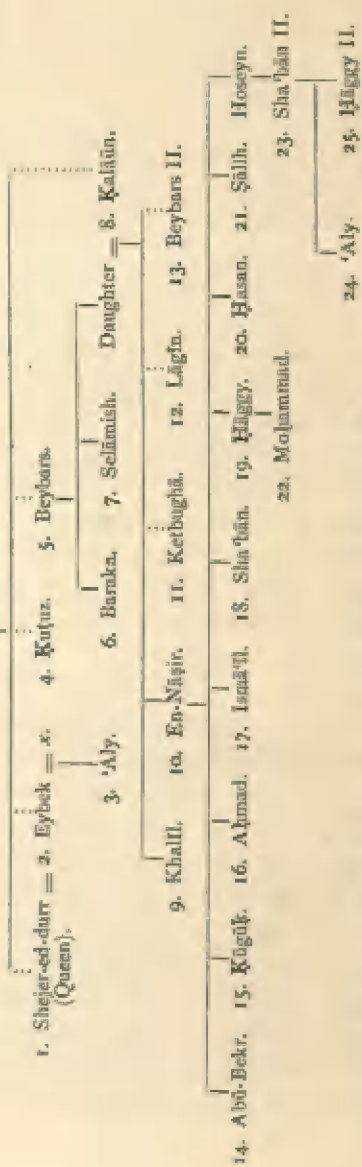
HOUSE OF AYYÜB.

Ayyüb.



BAḠRY MAMLÜKS.

(A dotted line denotes the relation of master and slave.)
Es-Şāliḥ Ayyüb. (See above.)



The Baḡry Mamlūks present some instances of a son succeeding his father, but as a rule the Sultans of this second line bore no blood relation to one another.

CHAPTER II.

ARCHITECTURE.

THE arts of the Saracens are for the most part intimately connected with their buildings; they are chiefly employed for the decoration of their mosques and houses. Of the examples of Saracenic art that have come down to us, the large majority form part of the ornament and furniture of mosques, or, in a less proportion, of private dwellings. Thus wood-work mainly consists of carved panels from the doors of mosques, pulpits, ceilings, and the panelled doors and lattice windows of houses; the mosaics and marble ornament, no less than the stone carvings, are chiefly derived from the walls of mosques and other buildings. The finest ivory is found in the doors of Mohammadan pulpits and the screens of Coptic churches; glass is represented by mosque lamps and perforated stained windows; pottery is mainly displayed in the form of tiles on the walls of mosques and houses; and of existing textiles, the most important, though not native to Egypt, are the prayer carpets. The only branch of art industry that does not more or less share in this intimate connection with a building is the metal work, which includes many small objects which have no stated position, but might be placed anywhere without violating their natural intention; and even metal-work in Cairo is best seen in the embossed bronze doors of the mosques. As a whole, it may be said that the art of mediæval Egypt was centred in the beautifying of its mosques and palaces, and that in most departments of artistic labour there is a certain architec-

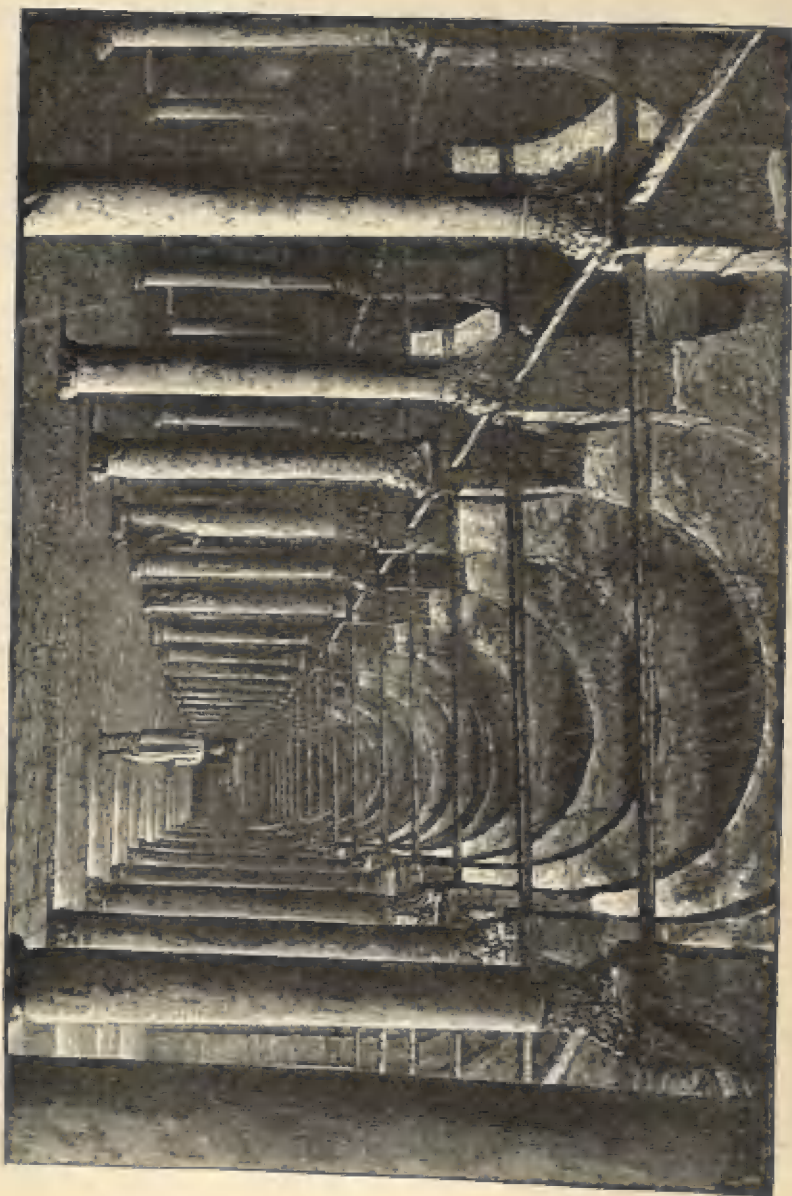
tural relation which shows that the various objects were elaborated with a direct eye to their effect when in the mosque or house. Of course, it does not follow that because the extant examples of Saracenic art in the middle ages are chiefly of this decorative character, there was no art of a less obviously relative nature. The artists who carved the wood and ivory of the mosques must have employed their skill on other things as well. But the sanctity of the mosques has procured for them a measure of respect which has preserved much of their decoration comparatively perfect to the present century, and a similar protection was not to be expected in the case of mere portable articles of furniture which could be burnt and broken and melted with no imputation of sacrilege. Objects of art which form part of buildings, whether sacred or not, stand a far better chance of survival than movable things, and this is, no doubt, to a large degree the cause of the one-sidedness of Cairene art as we now study it. Another cause is the simplicity of the Mohammadan idea of furniture. A Muslim grandee had much fewer modes of gratifying his artistic tastes than an English nobleman. The law of his Prophet, in the first place, forbade luxury, prohibited gold and silver ornaments, rich silks, and sumptuous apparel; it was impious to paint or chisel the image of man or any animate creature; and if a prince were not strongly under the influence of his religion, yet the general custom of his countrymen, and the conservatism of the East, would restrain him from eccentric innovations in the embellishment of his palace. Divans offered little scope for the artist; their frames, if not constructed of ordinary masonry, were made of palm sticks, or an unornamented framework of wood; the coverings alone could be sumptuous. A little low round table formed almost the sole piece of movable furniture in the room; there were no chairs for the Egyptian Chippendale to exercise his fancy upon; no bureaux, sideboards, book-cases, mirrors, mantel-shelves, or other pieces of decorative furniture, to be carved or inlaid; the little dining-table, or, rather, stool, with

its round tray instead of a cloth, permitted no array of fine glass and silver, though the few dishes that could be ranged upon it were often of very exquisite workmanship, and inlaid with the precious metals. Thus it happened that in the house as in the mosque the chief skill of the artist was expended upon the decoration of the structure, by mosaics and tiles on the wall, painting the ceiling, panelling and carving the doors and cupboards, and designing the stained windows.

No examination of the industrial arts of Egypt, therefore, would be intelligent which did not start from a clear comprehension of the characteristics of the buildings round which they were grouped. In a work of the present scope it is of course impossible to attempt a history of Saracenic architecture, even in its Cairene development ; such a task is worthy of the best endeavours of an architect, and would demand a volume to itself. It will be sufficient for the present purpose if the principal buildings of Cairo are briefly described in general classes, the chief distinctions of style and plan noticed, and a clear conception offered of what mosques and houses are like. For this purpose it will not be necessary to take many examples. A large number of the 300 mosques that still remain in various stages of preservation in that city offer no elements of originality, and not a few are modern and unworthy of study, except by those who would carry the history of an art down to its lowest stage of decadence. In houses we have unfortunately but a small choice to select from. Most of the noble palaces of the Mamlūk lords have long ago fallen to ruin, and there are now probably very few that can be called representative of the great period of Saracenic architecture. Still, while the palaces, for the most part, have passed away, there are here and there smaller houses of remarkable beauty, which preserve some of the best features of the true Cairo style.

The first idea of a mosque was extremely simple. The Prophet's mosque at Medina consisted of a small square enclosure of brick, partly roofed over with wooden planks, supported on pillars made

FIG. 2.—THE COLONNAD OF THE MUSEUM OF THE UNIVERSITY OF CHICAGO.



of palm stems plastered over. All that was needed was retirement from passing scenes, and shade from the sun's rays. It was not necessary that the whole of the square court forming the mosque should be roofed in, for the number of worshippers who remained for any length of time in the mosque would be small, and, for the

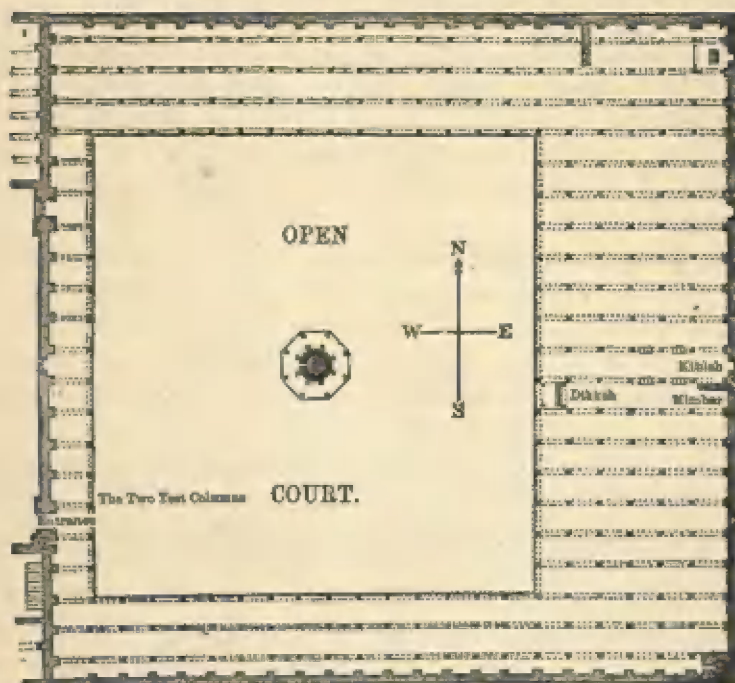


FIG. 3.—PLAN OF THE MOSQUE OF 'AMR.

brief periods occupied by the ordinary prayers, the open court could be used if the roofed portions did not afford space enough. The same principle was observed in the plans of the early mosques of Egypt. An open court for occasional use, and roofed cloisters for the regular congregation, were the essentials; and in the older

mosques in and around Cairo we find this plan carried out by a spacious open court surrounded on the four sides by covered colonnades or cloisters. The mosque of 'Amr at Fustât (or Old Cairo) has been so repeatedly restored that it is not safe to draw conclusions from its details; but it is certainly as old as the 10th century in its main outline, which consists of an immense court surrounded by covered colonnades (fig. 2). The mosque of Ibn-Tûlûn, which preserves, for the most part untouched, its original form and ornament as completed in the year 265 of the Hijra (A.D. 878), consists also of a vast open court surrounded by arcades or cloisters, which differ considerably in the details from the colonnades of 'Amr's mosque, but show the same general plan. The mosque of the Fâtimy Khalîf El-Hâkim, finished in 1012, resembles that of Ibn-Tûlûn in plan and many of the details, and the Azhar, though frequently restored, preserves its original colonnaded court of 971. The mosque of Edh-Dhâhîr Beybars, to the north of Cairo (1268), and that of En-Nâsir Mohammad in the Citadel (1318), are also of the arcade plan, resembling Ibn-Tûlûn, and the same form was adopted by Kûsûn (1329), El-Mâridâny (1339), and Aksunkur (1347), for their mosques in the first half of the 14th century, by Barkûk at the end of the same century for his tomb-mosque in the eastern cemetery of Cairo, and by El-Muayyad for his mosque (1420) in the Ghôriya, now in course of restoration.

The plan of an open court surrounded by colonnades is, as will be readily recognised, simply a survival of the ancient Semitic temple, as we see it in Phœnician and other ruins, and also in the porticos surrounding the Ka'ba at Mekka. The Arabs naturally adopted the form most familiar to them, and also best suited to the climate, and to the religious rites to be performed. This plan is universal in Egypt from the 9th to the 13th century, so far as extant buildings permit us to judge. From the 13th century the older plan shared the favour of the Cairene architects with a new form, which was, however, rather a develop-

ment of the former than a new departure. As space became more valuable in Cairo, and as architectural skill improved, and the art of spanning wide intervals by great arches became better understood, the cruciform mosque was naturally developed out of the old columnar or cloistered court. Instead of surrounding a spacious court with shallow arcades, a smaller court was enclosed by four deep recesses or transepts, each of which was covered by a single large arch; the plan thus resembles roughly a cross, of which the centre was formed by the open court, and the arms by the four covered recesses. A reason for this arrangement is perhaps to be found in the four sects into which the Mohammadans of Egypt were divided: for some of the cruciform mosques have inscriptions which show that a separate transept was allotted to Mālikis, the Hanafis, the Shāfi'is, and the Hanbalis. This plan seems to have been introduced into Cairo by the Ayyūby Sultans of the family of Saladin. The earliest examples are the buildings of El-Kāmil Mohammad, Saladin's nephew, whose collegiate mosque in the street known as Beyn-el-Kasreyn, or "Betwixt-the-Palaces," was erected in the year 1224. Two sides of this building were standing in 1845 when Mr. Wild made some sketches of the ornament, which he described as more like the Alhambra than anything he had seen in Cairo. The most famous extant specimen of the cruciform mosque is that of Sultan Hasan, built in 1356-9, where the arches opening into the transepts are of magnificent dimensions. Barkūk's medresa or collegiate mosque in the Beyn-el-Kasreyn, 1384, and the two mosques of Kāit Bey, one in the city, the other and more celebrated in the eastern burial-ground, one of the most beautiful monuments of Cairo (1472), also belong to the cruciform order, as does that of El-Ghōry (1503), besides many less important mosques.

The standard example of the *cloistered mosque* is that of Ibn-Tūlūn, the bold and massive style of which recalls our own Norman architecture. This is the oldest mosque of Cairo, or rather

of the quarter called El-Katāi', or "the Wards," which was the residence of the princes of the dynasty of Tūlūn, when Cairo was not yet founded. It occupies a space of about four hundred feet. The exterior is very plain, as is always the case with cloistered mosques. A high wall surrounds it on three sides, leaving a space of some fifty feet vacant between the wall and the mosque itself. The outer courts thus formed, in close resemblance to the plan of the Egyptian temple (as seen, for example, at Edfu), were intended to isolate the worshippers in the mosque from the noises of the street without. The front or east side is shut off from the street by houses and various apartments; and wash-rooms and other chambers for the mosque attendants or for worshippers block up part of the western outer court. The walls of the mosque have no ornament, except a crenellated or embattled parapet. Originally the mosque was entered by two doors in each of the three outer courts; the doors are simple and without any of the elaboration of later mosques.

Passing through the inner partition wall we find ourselves in a cloister or arcade looking into a magnificent court ninety-nine yards square (fig. 3), in the centre of which is a square stone building surmounted by a brick dome, which was built, however, a century later than the mosque itself, in the place of the original marble fountain covered by a painted dome resting on marble pillars. This vast court is surrounded on all four sides by arcades of pointed arches resting on piers of plastered brick. It is related that Ahmad Ibn-Tūlūn intended to have 300 columns for his mosque, but when he was informed that this would involve the destruction or dismemberment of numerous churches throughout the land of Egypt—for the Muslims took their pillars from Roman and Greek buildings—he abandoned the project. His chief architect, a Copt*, whose religious sympathies may have had something to do with Ibn-Tūlūn's clemency towards the Christian

* It is worth remarking that the almost contemporary Nilometer was built by an architect from Ferghāna.



FIG. 4. MOSQUE OF IBN-TULUN.

churches, then undertook to build a mosque without columns, save two at the niche which marked the direction of Mekka; and when he had drawn his design on parchment, and shown it to the prince, it was approved, and he was given a dress of honour, and furnished with 100,000 gold pieces, or about £60,000 to build the mosque. He began the work in A.H. 263, and completed it in 265 (878), when he received a fee of 10,000 pieces of gold.* It is clear from this account, which is derived from the historian El-Makrizy, that the mosque of Ibn-Tūlūn was the first experiment in brick piers instead of stone columns. Three sides have two rows of arches; the fourth, that which lies on the side towards Mekka, has five.†

All the rows of arches run parallel to the sides of the court, so that standing in the latter you look through the arches. The arches are all pointed (fig. 5), and constitute the first example of the universal employment of pointed arches throughout a building, three hundred years before the adoption of the pointed style in England. They have a very slight tendency to a return at the spring of the arch, but cannot be said to approach the true horse-shoe form. They rest on heavy piers of brick, the four corners of which are shaped in the form of engaged columns, with no bases, and only very simple rounded capitals, coated, like the rest of the building, with plaster, on which a rudimentary bud and flower pattern is moulded. The spaces between the arches are partly filled by windows with similar engaged columns and pointed arches. On either side of each window, in the face fronting the court, is a rosette moulded in the plaster, and a band of similar rosettes runs all round the court above the

* By gold piece I mean a *ḍinār*, a coin about the size of a half-sovereign, which then weighed 63 grains on the average, and was of nearly pure gold.

† As is well known, the prayers of Mohammādans are said with the face directed towards Mekka, which at Cairo means south-east. The older mosques are more correctly placed in the proper direction than the later. In referring to the Mekka side of a mosque the term "east end" will be used, as it conveys a more familiar idea to Europeans than south-east.

arches, over which is the embattled parapet. The faces of the arcades in the interior are somewhat differently treated. Round the arches and windows runs a knop and flower pattern, which also runs across from spring to spring of arch beneath the windows, and a band of the same ornament runs all along above the arches, in place of the rosettes, which only occur in the face fronting the court; over this band, and likewise running along the whole length of all the inner arcades, is a Kūfy* inscription carved in wood, and above this the usual crenellated parapet. The arcades are roofed over with sycamore planks resting on heavy beams. In the rearmost arcade the back wall is pierced with pointed windows, which are filled, not with coloured glass, but with grilles of stone, forming geometrical designs, with central rosettes or stars; but it is not quite certain that these belong to the original mosque; they may have been introduced in one of the restorations which are known to have been made. To whatever period they belong, they may compare favourably in variety and beauty of design with any Gothic tracery in existence. With the exception of these grilles, the central fountain, and the two marble columns by the niche in the east end, the entire mosque is built with burnt brick, plastered on both sides.†

The Mekka side, which is the *Iṭwān* or sanctuary, and specially the place of prayer, is deeper, as has been said, consisting of five arcades instead of two, and the arches fronting the court are

* Kūfy is a form of Arabic writing, older in its general application than the ordinary cursive hand, which is termed Naskhy, though the latter existed contemporaneously with the Kūfy in the first century of the Hījra. Kūfy is a stiff rectangular monumental script, whilst Naskhy is rounded and flowing. An example of the former may be seen in fig. 9, and of the latter in fig. 10. The oldest Kūfy is more rectangular than the later, which allows various curves and tails which were not used in the earliest form of the character.

† The bricks, according to Mr. Wild's measurements, are small and flat, about $7\frac{1}{2}$ inches long, by $2\frac{1}{2}$ inches wide, and $1\frac{1}{2}$ inches thick; the joints of mortar are very thick, generally about an inch. Wooden beams are introduced here and there to tie the brickwork together, especially at the spring of the arches.

filled almost to the height of the piers by wooden screens or partitions, which rail off the sanctuary from the court. It is ornamented in the same manner as the other arcades, except that the back wall, which in the other sides is plain, save for the grilled windows, in the east end was once carefully decorated, though at present little remains of the original mosaic and colour which El-Makrizy says were used for its embellishment.

The essential parts of the east end of a mosque are the *mihrah* or niche indicating the *kibla* or direction of Mekka, the *mimbar* or pulpit for the Friday sermon, and the *dikka* or tribune, a raised platform from which the Korān is recited and the prayers intoned by the imām or choragus. The niche is generally an arched recess in the centre of the east wall, richly inlaid with mosaics of marbles and mother-of-pearl, and often bordered with Arabic inscriptions. The niche of Ibn-Tūlūn is adorned with marbles of different colours. Very often the whole of the east wall is covered with ornament; dados of mosaic, friezes of inscriptions, panels of marble and tiles, are arranged with exquisite taste over the whole surface, broken only by the stained glass windows which form so beautiful a feature in the later mosques.

At each end of the sanctuary of Ibn-Tūlūn is a small minaret, and there is also a great stone minaret, in the west outer court, which has the unique peculiarity of an external winding staircase (fig. 4), reminding one of the traditional tower of Babel of the children's picture books. This is, however, quite phenomenal, and the ordinary minaret, which forms the most beautiful external feature of the Cairo mosques, if not, as Fergusson says, "the most graceful form of tower architecture in the world," has an internal winding staircase, and consists of a slender tower, constructed in several stories, which generally diminish in size and shape, from a substantial square at the base, through graduated octagons, to a cylinder or a group of dwarf columns at the top, on which is a small cupola surmounted



FIG. 5.—ARCADES IN THE MOSQUE OF IBN-TULUN.
Ninth Century.



by a knotted pinnacle and crescent, with several wooden staffs fixed at angles to the round of the cupola, from which lamps are suspended on the great festivals. Two or three galleries project at various heights, supported by stalactite corbels and cornices, and from these the muezzin proclaims the call to prayer five times a day. It is recorded by El-Makrīzy that the first stone minaret in Cairo was that of the mosque of El-Māridāny, built by the Master Suyūfy—all the earlier ones being of brick.* A very beautiful example of a minaret is seen in the engraving of the mosque of Kāit Bey (frontispiece). Sometimes the cupola at the top is fluted, as in a very pretty little minaret in the southern burial-ground of Cairo, which tapers upwards from the square by a series of diminishing octagons till the transition to the round can be gently effected. The transitions are ingeniously managed by those stalactite or pendentive ornaments, which are the peculiar property of the Saracenic architect, and are freely used to mask angles and to modulate such transitions as those in the dome and minaret. In describing the minaret we are, however, anticipating the true chronological order, for the earlier mosques do not present many of the graceful details which we see in that of Kāit Bey. The great minaret of Ibn-Tūlūn indeed diminishes by stages, but there are no stalactites in any part of this mosque, except over the *mihṛāb*, or niche, and these are probably a later addition.

Nothing has been said so far about the dome, and for this reason, that the mosque of Ibn-Tūlūn has none. It is a mistake to suppose that the dome is an essential feature of a mosque. The minaret is essential, because there must be a raised tower from which the *Adān* or Call to Prayer may resound over the city, though even this was dispensed with in the Prophet's own mosque at Medina, where the Muezzin Būlāl of the stentorian

* El-Māridāny's mosque is well illustrated in Ebers' *Egypt*, ii. 70; and the minaret is separately engraved in i. 61. It is converted from the square into an octagon very near the base, and thence at the first stalactite gallery into the round; above the second gallery (there are but two) is a stone neck or pinnacle, twelve courses high, supporting a conical bulb-like crown.

voice shouted the call from the gate. A dome, however, has nothing whatever to do with prayer, and therefore nothing with a mosque. It is simply the roof of a tomb, and only exists where there is a tomb to be covered, or at least where it was intended that a tomb should be. Only when there is a chapel attached to a mosque, containing the tomb of the founder or his family, is there a dome, and it is no more closely connected with the mosque itself than is the grave it covers: neither is necessary to the place of prayer. It happens, however, that a large number of the mosques of Cairo are mausoleums, containing chambers with the tomb of the founder, and the profusion of domes to be seen, when one looks down upon the city from the battlements of the Citadel, has brought about the not unnatural mistake of thinking that every mosque must have a dome. Most mosques with tombs have domes, but no mosque that was not intended to contain a tomb ever had one in the true sense. The origin of the dome may be traced to the cupolas which surmount the graves of Babylonia, many of which must have been familiar to the Arabs, who preserved the essentially sepulchral character of the form, and never used it, as did the Copts and Byzantines, to say nothing of European architects, to roof a church or its apse. The form of the true Cairo dome is not quite the same as that of Italy and St. Paul's; like most Saracenic designs it is based upon simple geometrical proportions. To draw the outline of the ordinary type (fig. 6), to which, however, there are exceptions, describe a circle A, draw tangents *ab*, to the length of three-fourths of the radius, join the extremities, and from each of the extremities draw a circle C, the radius of which shall equal the whole diameter of the first circle plus an eighth; and where these circles intersect erect the pinnacle. The whole can be done with compasses and rule.

Domes are generally built of brick, not moulded to fit the curve, but simply laid each tier a little within the lower tier so as to form the proper curve; the plaster which coats most domes

inside and out conceals the slight irregularity of the brickwork. Wooden frames are also sometimes used to support the lighter plaster domes, as is shown in the foreground of fig. 4. Some domes, however, are of stone, which is cut to the shape of the curve, and carved with the desired pattern. As a rule I have observed that plain and fluted domes are of plastered brick, whilst those ornamented with zigzag, geometrical, and arabesque devices are more commonly of carved stone. The surfaces of the domes

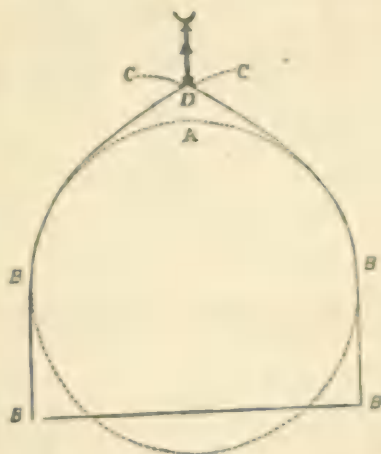


FIG. 6.—DIAGRAM SHOWING PROPORTIONS OF A DOME.

are ornamented in various ways. Sometimes they are covered with an intricate geometrical design, with star centres, as the domes of Kāit Bey and Al-Ashraf Bars-Bey in the eastern cemetery. A common decoration consists in bands of zigzags, or chevrons close together, running horizontally round the dome from base to apex, such as we see in the tomb-mosque of Barkūk (1407). Many domes are fluted, and these would seem to belong to all periods of Cairo architecture, for we find the fluted cupola surmounting the *mibkharas* or quasi-minarets of the mosque of El-Hākim (1012; but these may belong to the

walls to support the outer dome. "The dome," as Franz Bey remarks, "is blended with the quadrangular interior of the mausoleum by means of pendentives [stalactites]; while externally the union of the cube with the sphere is somewhat masked by the polygonal base of the dome. In some cases the transition is effected by means of gradations resembling steps, each of which is crowned with a half-pyramidal excrescence of the height of the step. These excrescences might be regarded as external prolongations of the pendentives of the interior, but do not correspond with them in position. The architects, however, doubtless, intended to suggest some such connection between the internal and external ornamentation." Sometimes the dome is set simply on the cube of the building with no gradation at all. A row of windows commonly surrounds its base.

We have digressed thus far in order to finish what had to be said on the subject of domes, which form, with minarets, the most prominent features of Cairo architecture. As has been remarked, they are not found in the mosque of Ibn-Tūlūn, nor indeed in most of the cloistered mosques. That of El-Hākīm has no dome, nor have the Azhar, the mosque of En-Nāsir in the Citadel, that of El-Māridāny, and several others, owing to the absence of tomb-chapels. Barkūk and El-Muayyad are buried in their mosques, and domes are therefore proper. There is a domed structure, indeed, in the centre of the court of Ibn-Tūlūn, but the date of this is much later than the mosque; and it is a question whether the original dome built in this place by Ibn-Tūlūn was not intended to cover his own tomb: when he died, and was buried in Syria, the domed edifice may have been converted into its present use as a fountain for ablutions. There is, however, a feature in the cloistered mosques, or in some of them, which has a close resemblance to a dome; this is a small cupola, which seems to have been not uncommonly erected over the niche. There is such a cupola over the niche in Ibn-Tūlūn, and though this is probably of the date of the restoration by Lāḡin, in 1296, to

judge by the wooden stalactites which are found in no other part of the mosque, yet it is probable that the restorer only replaced an original cupola with one in the style of his own time. The Azhar University mosque, a century later than Ibn-Tūlūn, has a raised portion of the arcade over the *kibla*, which once carried a small dome or cupola, and the same feature is observed in the Citadel mosque of En-Nāsir Mohammad, where the cupola, which stood on high columns, has also disappeared. There are probably other examples with traces of this arrangement which have been overlooked; but it was not necessary or universal. These cupolas over the niche are not domes properly speaking, though they have the melon form; they are smaller than the true dome, and correspond rather to the lantern of a house.

The ornament of the cloistered mosque consists partly in the borders and frieze which run round and above the arches, and beneath the crenellated parapet; the capitals of the columns; and the geometrical grilles of the windows, of which Ibn-Tūlūn and Edh-Dhāhir Beybars offer very fine examples.* Some beautiful grilles were still standing in the ruins of the mosque of Kūsūn in 1883, though the ex-Khedive had run a road through the bulk of this splendid edifice. These ornaments are in stone or plaster. In wood, the chief decorations are the Kūfy frieze, which may also be of plaster; the ceiling, which is often exquisitely painted and carved; the junction with the wall, masked by a cornice or stalactite corbels; and the pulpit. Mosaics and tiles are chiefly, or exclusively, used in and round the niche in the east end, and metal-work and carving are employed for the massive doors. All these several modes of decoration will be found described under their separate headings.

Of the principal examples of the cloistered mosque in Cairo, those of Ibn-Tūlūn, El-Hākim, and Barkūk have the arches supported on piers, and running at right angles to the side

* See the plates in Bourgoin's *Les Arts Arabes*, and Owen Jones' *Grammar of Ornament*. And for Kūsūn's grilles, see Prisse d'Avances, pl. 46.

of the court ; but the mosques of 'Amr, the Azhar, of En-Nāsir in the Citadel, of Kūsūn, El-Māridāny, El-Muayyad, and others, have columns instead of piers, and the arches sometimes run parallel with the court. The marble columns employed in mosques, which are often very numerous (the Azhar has 380 in the sanctuary alone), were generally abstracted from Roman buildings or Christian churches, with capitals of various orders, arranged with little regard to symmetry, and prolonged in a quaint fashion, if too short, by a pedestal or inverted capital used as a base. There is, however, a Saracenic capital, derived from simple Ptolemaic models, of a distinctive character. It is used both as a capital and as a base, and is contained by four surfaces proceeding in curves from the square abacus, and joining at the round of the column. Above the abacus of this, and also of Roman or Corinthian columns, is placed a second abacus of wood, joined from pillar to pillar by a wooden bar. The mosque of Barkūk is not only surrounded by arches on piers, but instead of a ceiling has a groined brick roof, which is very exceptional in mosques, though frequent in other buildings—as in the great stone city gate, the Bāb-en-Nasr.

The second style of mosque, with the *cruciform* plan (fig. 7), cannot better be exemplified than by the mosque of Sultan Hasan. This magnificent edifice, the loftiest and in some respects the most imposing in Cairo, was built during the years 1356—9, at the cost of 1,000 dīnārs of gold a day, and the legend is related that the Sultan took the futile precaution of cutting off the architect's hand in order to prevent any further efforts of his genius. The interior of the mosque consists of a cross, of which transept on the east side, which may be compared to a chancel, is larger than the three other arms, while the founder's chapel (over which is the dome) occupies the position of a lady-chapel behind the chancel. The outline of the founder's chapel is visible on the outside, but the cross-shape is not ; the spaces in the right angles, between the four transepts or arms, are so filled with offices

and schools and other apartments (as is the case with most cruciform mosques) that the exterior has the form of an irregular oblong, the sloping outline of which is partly due to the line of the street which runs past the mosque to the Citadel which it confronts. The exterior walls from the base to the top of the cornice are about 113 feet high, and are entirely built of finely-cut stone brought from the Pyramids. The broad expanse of wall is slightly relieved by windows, of which the most prominent—those of the founder's chapel—consist of two horseshoe-headed lights, surmounted by a single round window, placed in a tall shallow recess, which is brought forward at the top to the face of the wall by stalactite corbelling supporting a trefoil arch. The other windows are plain rectangular grilles (sometimes as many as eight, one above another), similarly placed in tall shallow recesses with stalactite tops, or small circular windows set in square recesses. The eastern corners of the main building resemble polygonal towers, and the angles of the chapel are ornamented with graceful pilasters or engaged columns, carved in a spiral or twisted design, with stalactite capitals, reaching to nearly half the height of the wall. The cornice, which is unusually prominent in this mosque and forms one of its most beautiful features, consists of six tiers of stalactites, each overhanging the one below it, till the top projects some six feet; the coping is plain, without the usual crenellated parapet. The other external ornaments are—(1) the dome, which was rebuilt in the last century, and though large, is squat, and wholly unworthy of the mosque; (2) the two minarets, of which that on the south-east angle of the mosque is the tallest (280 ft.) in Cairo, a handsome structure, with two galleries, and a cupola on the summit, resting on graceful pillars, erected on a third gallery; another lofty minaret, over the portal, was thrown down by an earthquake in 1361, soon after its completion, killing three hundred children in the adjoining school; the other surviving minaret is a puny erection, and gives the mosque a lop-sided aspect; and (3) last, but by no means least, the splendid main



FIG. 8.—ORNAMENT FROM THE PORTAL OF SULTAN HASAN.

portal. This gateway, which is approached by some seventeen rather insignificant steps, laid sideways along the face of the wall,* is the chief subject of external decoration in the mosque. It consists of a square arched niche, or recess, 66 feet high, open to the outside, and vaulted in a half sphere, which is gradually approached by twelve tiers of stalactites, ingeniously arranged so as to modulate the square recess into the semi-domed summit. At each side of the portal, on the outer wall, are tall borders of bold arabesques, with stalactite summits, and arabesque medallions at the base, running up the whole height of the portal. Beyond these on either side are geometrical panels, and then twisted corner columns with stalactite capitals, which bound the slight projection or buttress in which the portal is set. The inner angles of the gateway are decorated with smaller columns (not twisted), with stalactite capitals and borders of fine geometrical and arabesque (fig. 8) designs. On either side of the niche, inside, is an arched recess for the doorkeepers, set between columns, and surmounted by stalactites and patterns of coloured stone, and over the central bronze-plated door, which leads into the mosque, is a window with similar side columns and stalactites. The surfaces of the interior walls of the gateway are variegated by alternate courses of black and white marble.†

Passing into the mosque, through a handsome vaulted vestibule and some bent passages, we find ourselves in the hypaethral court, or *sahn el-gāmi**, which is 117 feet long by 105 feet wide. It is

* These were put up in 1422. The original platform and steps had been destroyed, together with the galleries of the minarets, by Barkūk, in 1391, in order to prevent the military factions using the lofty position afforded by the mosque as a battery upon the Citadel opposite. Guns have been frequently engaged between the Citadel and the mosque; and some of Napoleon's shot can still be seen embedded in the wall. The original bronze door and lantern were also removed during the period of interdict referred to, and were bought by the Sultan El-Muayyad for his own mosque.

† Fair views of Sultan Hasan's mosque, exterior, portal, and interior, may be seen in Coste, *Architecture Arabe*, pl. 21-6; Ebers' *Egypt*, i. 238, 262, 268; and my supplement to *Picturesque Palestine, Sinai, and Egypt*, entitled *Social Life in Egypt*, 95.

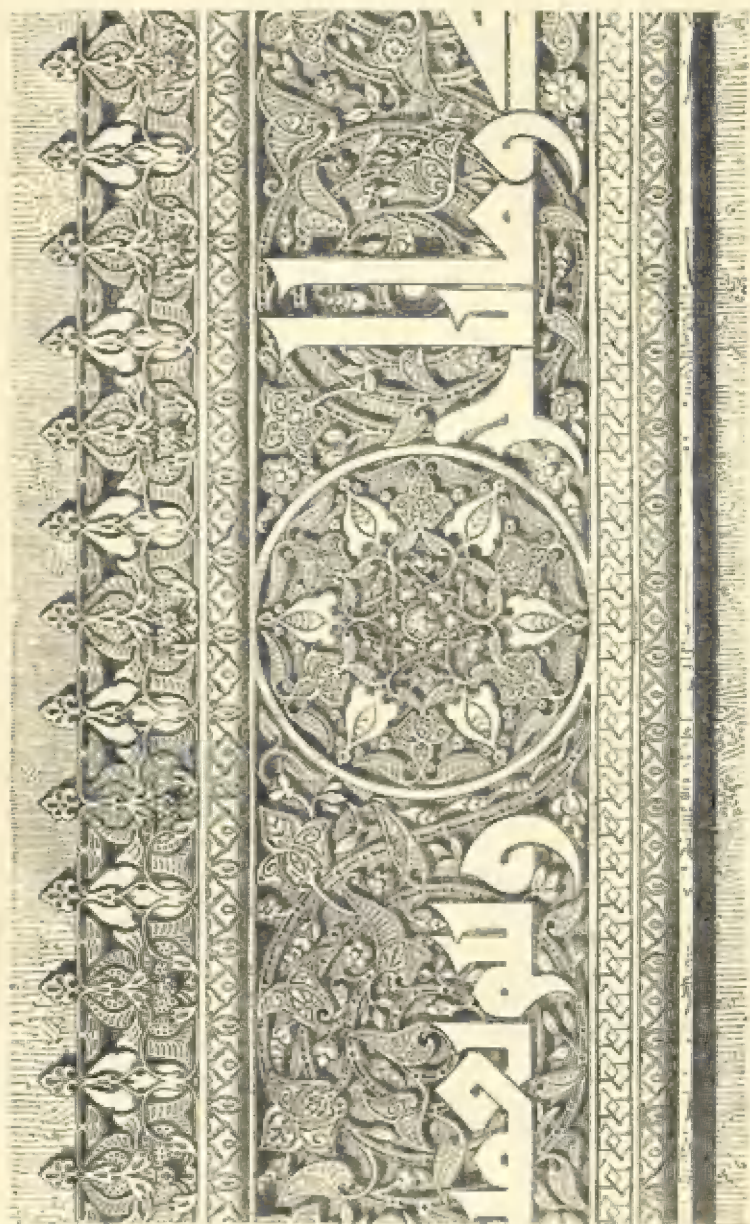


FIG. 9.—KUFIC FRIEZE IN MOSQUE OF SULTAN HASAN,
Fourteenth Century

paved with marble slabs and medallions arranged in various patterns. In many mosques massive granite slabs taken from the ancient temples of Egypt, and sometimes carved with hieroglyphics, are laid in the pavement, especially at the threshold. In the centre is a *mevda'*, or tank for ablutions, crowned by a ruinous plastered wood cupola, resting on eight marble columns, by the side of which stands a smaller octagonal fountain, or *hanafiya*, with taps, for the use of the sect of the Hanafis, who require running water for their washings preparatory to prayer. Each of the four transepts, opening out of the court and raised a step above its level, consists of a single deep arch, the arching being continued throughout the whole depth of the transept. On either side of the north, south, and west transepts is a door set in a stalactite recess, with windows over it. The transept at the east end is larger and loftier than the other three. It is ninety feet high, ninety feet deep, and sixty-nine feet wide. The framework of this vast arch is stated to have cost 100,000 francs. Like the rest of the mosque, the interiors of the transepts are built of brick plastered over; but the facing of the arches (where every third course is coloured red) is of stone, and the walls which connect and surround the arches, forming the square outline of the court, are also of stone, but are plastered over. The coping of the court is formed by an embattled parapet. The smaller transepts are almost plain, but the chancel or sanctuary at the east is adorned with a marble dado, which runs round it to the height of about four feet; and the east wall or back of this is richly decorated with marble slabs, which rise to the height of thirty feet, and are arranged in rectangular panels and borders of contrasted colours, black, white, and yellow. In the centre of the east wall is the *mihrab*, or niche, indicating the direction of prayer towards Mekka.* This consists in a semicircular recess about six feet wide, the front edges of which are composed

* This direction or point of the compass is called the *kibla*, and the common application of this term to the niche itself is an error.

of two marble columns, and the top of a pointed arch vaulted like a shell inside. The interior of the niche is beautifully adorned with three tiers of arches (the first pointed, the second round, and the third trefoil) supported by dwarf columns, one above the other, and divided by arabesque borders and bands of greenstone. The backgrounds of the arches behind the dwarf columns are alternately of red and green marble. The shell-like top of the niche is decorated with marbles arranged in rays, and the facing of the arch itself is treated with the common zigzag ornament, which is seen so frequently round arches and over doors in Cairo. The effect of the whole is extremely rich, and the details are finished with infinite care and skill. A Kufy inscription (fig. 9) of large bold characters within fine borders runs round the sanctuary just above the marbles, and overlaps the edges of the arch. Above this, in the east wall, are two windows, each of two lights with a circular light above, and a central round aperture. In front of the niche, a little on the left hand (as you face the court), stands the pulpit, a staircase enclosed by high sides, and ending in a small platform surmounted by a cupola supported by a column on either side. Most pulpits are of carved and panelled wood, but that of Sultan Hasan is of coloured marbles arranged in circular medallions. Further in front, nearer the court, is the *dikka*, or tribune, which in most mosques is a light structure of wood, but here is of stone and marble, and rests upon solid piers and columns, with very graceful columns let into the corners, and formed of alternate zigzag drums of white, black, and yellow marble. From the top of the arch hang seventy-seven cords, to which are fastened as many small glass lamps, and many more are suspended from the simple gallows brackets which are ranged along the side walls, about half-way between the dado and the Arabic inscription. A large bronze chandelier hanging from the keystone of the great arch completes the furniture of the sanctuary.

By a beautiful bronze-plated door, on either side of the niche, we obtain access to the sepulchral chapel of the Sultan who caused all this wonderful building to be erected for the honour of his Creator and himself. This is the portion of the mosque which underlies the dome. It is sixty-nine feet square, and is surrounded on all sides with fine tablets of coloured marbles, forming a dado of the height of twenty-five feet or more, and broken by eleven arches, either blind or with doors closing cupboards, and including a niche in the east wall resembling in design the niche of the inner wall already described. Over the marbles is the "Throne Verse" from the Koran (ch. ii. v. 256) carved in wood, and forming a frieze all round, interrupted only by medallions containing the name of the Sultan; the usual lamp brackets are fixed above the frieze. Higher up still are the windows, which are badly planned; most of the glass is gone, and what remains resembles common bottle glass. Above are fine wooden stalactites, painted and gilt, marking the transition from the square to the dome. The founder's tomb is a plain marble grave, enclosed in a simple wooden railing:—the whole chapel is the true tomb. It should be noted that the tomb chapel is not surrounded like the rest of the mosque by offices, schools, and chambers of all sorts; it stands out clear from everything, and three of its sides are outside walls, the fourth being the east wall of the sanctuary.

Such is the great mosque of Sultan Hasan. It forms a typical example of the cruciform mosque, although its materials are much more substantial and costly than usual, and its size far transcends all other mosques of this plan. In none other do we find the same noble span of arch, the same lavish display of marbles; in a word, the same grandeur. But there are many mosques in Cairo that are more pleasing than that of Sultan Hasan, whose broad surfaces of unrelieved plaster find inadequate compensation in the rich but heavy mosaics of the sanctuary wall. And in spite of its imposing proportions, there is something ungainly about the exterior of this big mosque; the stone walls, besides the defect of being un-

parallel, seem heavy and insufficiently relieved; the dome, being modern, is unsightly; and the minarets do not balance. For a very different specimen of a mosque of the *same* cruciform plan, let us glance at the illustration (frontispiece) of the mausoleum of Kâit Bey, another Mamlûk Sultan, and the prince of Cairo builders. This mosque is situate in that wonderful wilderness of exquisite domes and minarets known as the great or eastern Karâfa or cemetery, and also as the Karâfa of Kâit Bey *par excellence*. Here we see the dome and minaret in their utmost perfection, and the proportions of the cruciform mosque most admirably displayed. The exterior is fluted with shallow recesses like Sultan Hasan's, in which the windows are set, and is striped red and white, in imitation, no doubt, of the ancient Roman buildings of Egypt, where courses of red brick alternate with a row of white stone. The effect is not so unpleasant as might be imagined; for when time has softened the red ochre, the zebra-like walls seem suited to the character of the architecture.* The door is set in a deep *recess* like that of Sultan Hasan, but on a smaller scale; and the details of such doors may be better seen in the engraving (fig. 10), which represents a gateway of another mosque of the same Sultan within the city of Cairo. Kâit Bey's mosques, and those generally of a late period, are much more elaborately decorated than early cloistered mosques like Ibn-Tûlûn. We have seen that the ornament in the latter consists chiefly in bands and friezes running round and above the arches, and in the mosaics in the sanctuary. In Kâit Bey's mosques the triangular spaces between the arches and the square of the court are filled with arabesque scrolls carved in stone; the keystone and every alternate stone in the arch is similarly ornamented; the interior doors are surmounted by

* It is worth noticing that the courses of stone in a mosque or house are always 13 or 14 inches high, and are hardly ever subdivided. The windows, doors, and ornament are therefore regulated by the courses, and are four or six courses, or whatever the number, and not four-and-a-half, &c. It is thus easy to calculate the height of a building of stone by counting its courses.

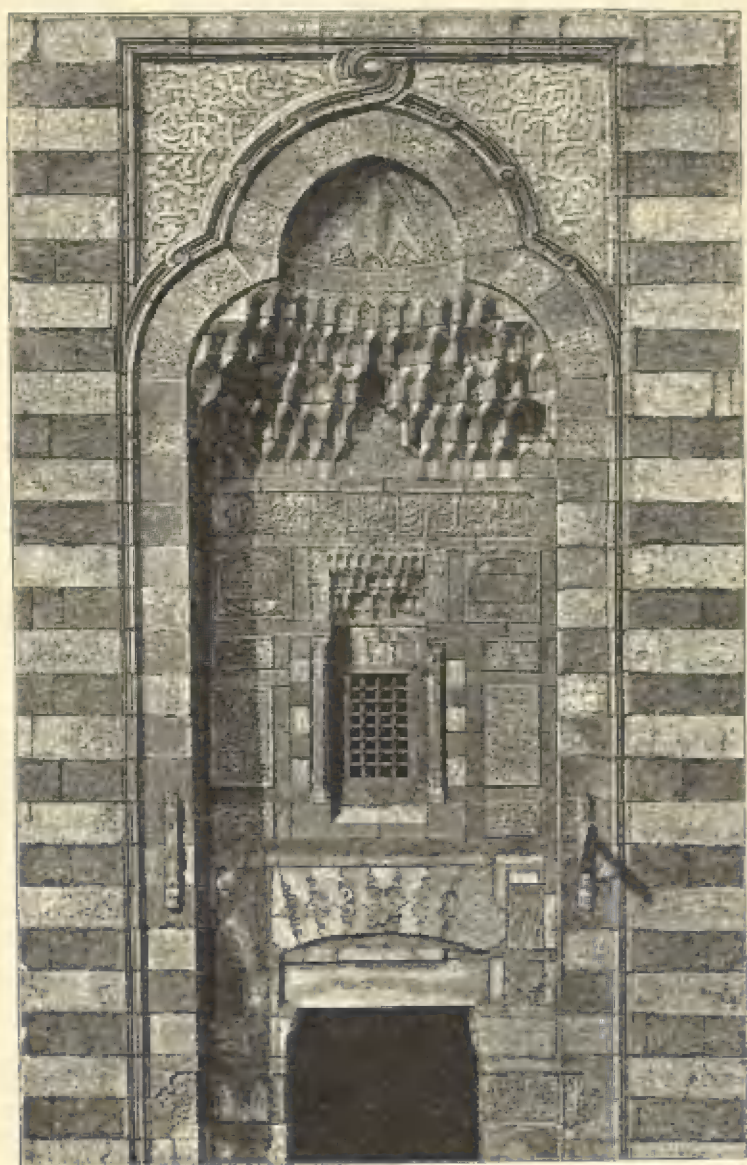


FIG. 16.—DOORWAY OF SMALLER MOSQUE OF KAIR BEY.
Fifteenth Century.

carved architraves, and over these are little windows between pillars, and surmounted by stalactites. Medallions occupy the centres of large expanses of ornament, and are filled with the name and titles of the Sultan who built the mosque, with a prayer,—"Send him victorious!" Marble inlay covers the lower portions of the walls, and marble slabs are arranged in the pavement. The whole interior surfaces wear the aspect of a beautifully woven and embroidered carpet, and however much we may criticise the structural vagueness of the edifice, it is impossible to refuse our admiration to the details of the ornament. These complexly-decorated mosques are naturally of the smaller cruciform shape, for the large extent of wall in the cloistered style would not only demand an almost impossible quantity of costly material and time, but would not repay the artist in the effect.

The two general types of mosque described above, with their usual styles of decoration, will give a sufficient idea of the purposes to which the arts of the Saracens are applied; but they do not by any means exhaust either the architectural character or the modes of decoration of the religious buildings of Cairo. It is not possible in a limited space to enter into the varieties of Cairo mausoleums, dervish convents, and other buildings; but a few examples will serve to show that, while the majority of mosques fall under one or other of the categories above described, there is infinite variety among those that depart from the ordinary outline. Among these, one of the most remarkable is the mausoleum of Kalaūn. This is attached to the northern side of the great hospital or Māristān, built by that Sultan in the Beyn-el-Kasreyn, and separated from it by a vaulted passage entered through a splendid black and white marble portal.* The Māristān originally comprised an infinity of chambers, lecture-rooms, theatres for operations, surgeons' rooms, mortuary, pro-

* For illustrations of Kalaūn's Māristān and mausoleum, see my *Social Life in Egypt*, 91; Ebers' *Egypt*, i. 247-50. Both these works contain several large engravings of mosque interiors, which should be studied in connection with this chapter.

fessors' lodgings, cells for the mad patients, a mosque, and many other features, of all which little now remains. But the tomb of the builder, which is entered from a gateway in the passage opposite to that which admits one into what is still standing of the once extensive Māristān, is in extremely fine preservation, and contains many peculiar and beautiful features. It is built of stone, and consists of a vestibule or antechapel, and a square chapel, covered originally by a dome, but now only by a flat ceiling. The support of the dome is an octagonal inner structure, resting upon eight arches, of an elongated and slightly horse-shoe form, supported by four piers and four massive granite monolithic columns. The arches are surrounded by a border of very delicate and lace-like arabesque tracery, in plaster, which terminates over each of the eight arches in a rose of arabesque open-work. Above each arch is a window composed of two round-headed lights and a circular light above. The niche is decorated with beautiful dwarf arcades, the arches being delicately chiselled in a very graceful shell form, and supported by little pillars. Bands of coloured marble separate each tier from the next. The marble tomb is in the centre of the chapel, enclosed with a wooden railing of coarse lattice work; but the magnificent carvings on the doors of the Māristān (figs. 46—48) atone for any shortcomings in the tomb itself.

The exterior of the mausoleum is coloured red and white in squares like a draught-board, and is peculiar in other respects. At the base, half a dozen dwarf columns, surmounted by tall piers or pilasters, support lofty arched recesses, running nearly the full height of the wall. The recesses are not of equal size; and the larger are occupied by a single window between columns (divided into two lights by a column surmounted by a round light, giving the effect of a trefoil), and the smaller by a similar window over a small pointed window of a single arch. The windows are filled with grilles of geometrical open-work, and the arched portions of the recesses in which they are set are coloured in radiating bands

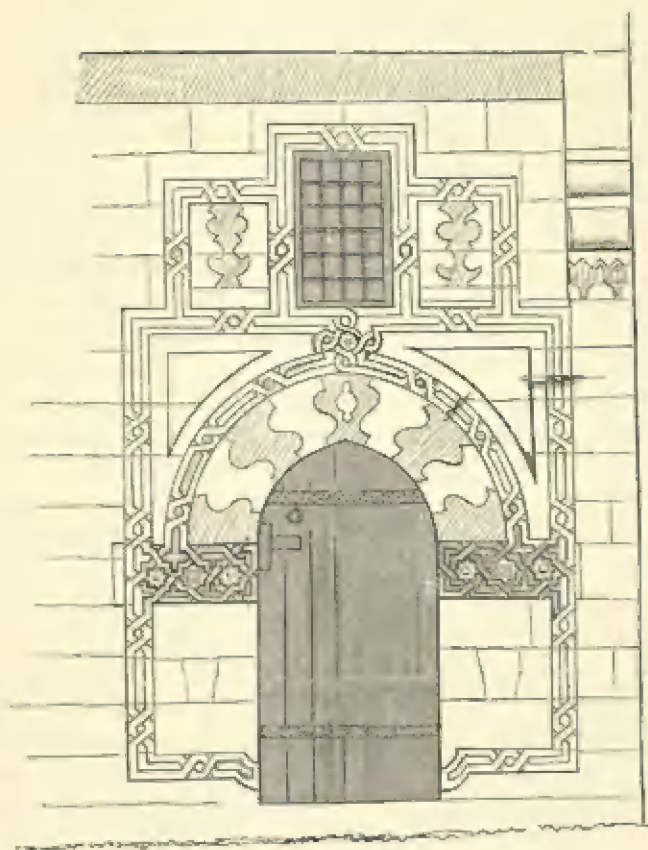


FIG. 11.—DOORWAY OF A PRIVATE HOUSE.
(From a Sketch by J. W. Wild.)



of red and white; and even the columns share in this zebra decoration. Beneath the row of windows, running across pilasters and recesses alike, is a fine Arabic frieze, painted red, and at the top of the wall is an embattled parapet of remarkably fine zigzag teeth filled with geometrical ornaments. The cornice is a mere double line. Over the top are seen the windows, set in pointed arches, of the internal octagonal structure, which ought to be crowned by a dome; and on the right-hand side is a massive square minaret (of somewhat later date) in three stories, each with its plain gallery supported by very simple stalactite cornices, the first checkered red and white, the second in red and white bands, the third cylindrical, ornamented with striped columns surmounted by interlaced arched tracery.

The domestic architecture of Cairo, varied as are its details, possesses certain general features common to all examples. The first and all-important object of the Mohammadan architect was to screen the women of the house from the view of strangers. Cairene building rests on the principle that the inmates of the house must neither be seen of passers by, nor see too much themselves of the outside world. Hence the prime condition of domestic architecture was to build the rooms round an interior court, into which the chief windows looked, and to make as few windows as possible, and those few closely latticed. As a result, those streets of Cairo which are lined with private houses exhibit a somewhat monotonous aspect. The houses are generally two or three stories high—in the old Mamlūk days they were of five stories—and are built of stone on the ground floor (coloured in alternate red and white courses with red ochre and limewash), and of brick tied with wood and coated with white plaster on the upper stories. The doors are often very tastefully ornamented (fig. 11); but there the external decoration generally ends, for the windows on the ground floor are generally but small rectangular apertures closed with lattice work, and set high above the reach of curious eyes, and even those on the

upper stories are commonly small and plain, and arranged with no regard to symmetry, though there are still some examples of streets where the higher floors of the houses are furnished with richly-ornamented lattice windows (fig. 12). These lattice windows are called *meshrebiyas*, "drinking places," from the semi-circular or semi-octagonal bow, which commonly juts out from their centre, in which the porous water-bottles of the house are placed to cool by evaporation in the air. Unlike the mosques, there are no friezes of ornament or inscriptions on the outer walls of houses.

The door generally opens flat against the side wall of the passage inside, turning upon a pivot in the lintel and threshold, and is confronted by the *mastaba* or stone seat (sometimes replaced by a *dikka* or chair of lattice work) on which the door-keeper (*barwāb*) sits. Thence a passage, which makes one or two sharp bends, with the intention of foiling any attempt of inquisitive eyes to see into the interior through the door when it happens to be open, leads into a square court, unpaved, and open to the sky, in which is a tree shading the well, supplied by infiltration from the Nile with somewhat brackish water. No eye should see into the court from any other house, still less from any street. The four sides are lofty, and are composed of the rooms of the house, with their beautiful *meshrebiyas*, or if only three sides are thus occupied, the fourth consists of a plain partition wall, dividing the house from its next-door neighbour, and pierced by no aperture. The south side of the court is that on which the chief rooms of the mansion are built, for here the cool northern breezes, so dear to Cairenes in the hot season, can best be enjoyed. The rooms most accessible from the court, on the ground floor, are those which belong to the men of the household, and include the offices, stables, storerooms, and men-servants' rooms, besides the reception-rooms of the master for his male guests. These last, in the best houses are three in number: the *mandara*, the *mak'ad*, and the *takhtabōsh*. The two last are chiefly for summer use; the



FIG. 17 —A STREET IN CAIRO.



first is the general men's saloon. The takhtabōsh is nothing more than a recess in the corner of the court, supported by a single column, paved with marble, and furnished with divans; it is an alcove rather than a room. The mak'ad is a belvedere or open gallery, raised some eight or ten feet above the ground, on the south or cool side of the court, into which it looks through three or four arches, open to the northern breeze. It is plainly furnished like the takhtabōsh, and is a pleasant lounge for the men in hot weather. Sometimes this belvedere is latticed in front for the use of the women, but, as a rule, it is a man's apartment. The third room, the *mandara*, is arranged, like all Cairene reception-rooms of the closed order, in two levels. A paved walk or floor, leading from the door, and ornamented with coloured marbles, is called the *durkā'a*, and its use is to receive the visitor's shoes before he steps up to the carpeted portion of the room. The *durkā'a* has often a fountain playing in the centre, in the midst of a tessellated marble border, and a sideboard or stand for water-bottles occupies the extremity facing the door. On one side of this narrow pathway is the room proper, to which the *durkā'a* supplies the place of a vestibule. There is no partition between the two, but the room is raised a step higher. The general plan of a reception-room is thus seen to consist in a low pavement and a *daïs*. The *daïs*, which is not a mere recess, but a spacious room, is furnished with divans running round the sides, raised from the floor by low stone slabs or palm-frames. Above the divan is a dado of coloured marbles or tiles, broken only by the cupboards, with little open arcades, filled with porcelain and earthenware vessels, by recesses containing cushions for reclining, and at the end by the *meshrebiya* or lattice window, over which is often a row of stained-glass windows forming the topmost panel of the *meshrebiya*, or a few windows of the same character are set in the wall above. The surface of the walls is simply lime-washed, or left of uncoloured plaster, and a plain wooden shelf forms the principal relief.

The ceiling is constructed of beams, clearly displayed, and resting on corbels or cornices, all of which are painted and gilt in arabesque designs, while the spaces between the beams are coffered in little compartments, each decorated with tasteful arabesque and floral designs.*

A small and carefully-closed door conducts to the *harim* or women's apartments, which are on the upper floors, or in large

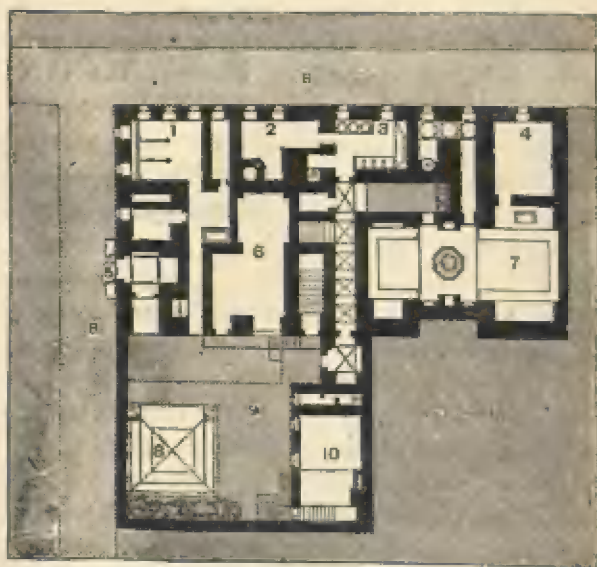


FIG. 13.—PLAN OF A CAIRO HOUSE. GROUND FLOOR.

11. Street; 1. Stable; 2. Bakehouse; 3. Kitchen; 4. Small mandara; 5. Entrance; 6. Strangers' room; 7. Chief mandara; 8. Mak'ad; 9. Court; 10. Servants' room.

houses occupy a separate court to themselves. Of the *harim* rooms the chief is the great *Kā'a* or reception-room. This resembles the *mandara* in its decoration, but has a *divān* or dais on each side of the *durkā'a* instead of only on one side, and thus forms

* These various details of the Cairo room will be more fully described under their respective headings.

a double room.* It is also loftier than the mandara, and often rises to the roof of the house, while its *durkā'a* (which seldom has a fountain) is surmounted by a sort of clerestory, projecting above the rest of the ceiling, and crowned by a lantern or cupola. There are also some smaller sitting-rooms; and bedrooms, which are supplied with no furniture but the pallet-bed, which is rolled up and thrust away into a closet in the morning.



FIG. 13A.—FIRST FLOOR.

1. Servants' rooms; 2. Linen room; 3. Space over rooms; 4. Men's rooms; 5. Mandara; 6. Space over chief mandara; 7. Courtyard; 8. Strangers' rooms.

There is often a small sitting-room on the top story, with a cupola, an example of which is to be seen in the South Kensington Museum (No. 1193—1883), and also some ventilating chambers, open to the flat roof, on which are erected the sloping wooden screens or *malkafs*, so familiar to those who have looked down upon Cairo from the Citadel, the object of which is to guide the

* Some mandaras, however, have two daïses, like the *Kā'a*.

north winds down into the house. In the ventilating chambers beneath the malkafs, or on the upper terrace of the roof, open to the sky, the inhabitants are wont to sleep in the hot months.

The arrangement of the rooms is incapable of generalisation; they are built on every variety of plan: that given in the accompanying diagrams (from Prof. Ebers' *Egypt*) is a fair example. Some, like the great *kā'as* and *mandaras*, may rise to the whole



FIG. 138.—SECOND FLOOR.

1. Rooms; 2. Bath; 3. Harim; 4. Space over mandara; 5. Space over rooms;
6. Court; 7. Strangers' rooms.

height of the house; others form mezzanine stories of the normal height of fourteen feet. You frequently have to ascend or descend several steps in going from one chamber to the next. Seclusion for the women, air from the north, and subdued light, are the three essentials, and after these have been attained the architect could exercise his ingenuity as he pleased. It should be noticed that Cairo architecture is an internal art, for all its best skill

is spent on the interior of the house; and that the decoration is architectural, since, as has been well said, the rooms are furnished by the architect and not by the upholsterer. The general effect of the courts surrounded by lattice-windows and arched belvedere, and of the interior of the reception-rooms, with their soft light, primitive colours, and obvious honesty of construction and decoration, is strangely attractive. The honesty of the work impresses one everywhere: "The beams which support the ceiling are plainly visible to the eye, and are supported at the ends by elongated corbels ending in perfect stalagmitic patterns. Nothing is hidden away; there is no insincere work. One of the beauties of the rooms is the extensive use of wood, and the rare use of stucco, which is indeed a testimonial to the sterling value of the architect's work, since he preferred to go out of his way to employ wood for his purpose, when he might have got a far easier but more perishable material at home." *

The houses above described are those of ordinary gentlemen of fifty years ago. In the great periods of Fātimy and Mamlūk splendour—to judge from contemporary records and the scanty remains that have come down to us—the palaces of the chief lords were much more splendid. Nāsir-i-Khusrau, who travelled in Egypt in the 11th century, remarks that most of the houses of Cairo had five or six stories, and were built with such care that one might fancy they were constructed of precious stones instead of mere plaster and brick and ordinary stone. Each house, he adds, was isolated from its neighbour's by gardens. Jehan Thénau, who accompanied André Le Roy, the ambassador of Louis XII. to the Mamlūk Sultan El-Ghōry, at the opening of the 16th century, tells us that the house assigned to the embassy contained six or seven beautiful halls, paved with marble, porphyry, serpentine, and other rare stones, inlaid with wonderful art; the

* R. S. Poole, in a lecture delivered before the Royal Academy, and summarised in the *Builder* of 14th February, 1885.

walls were of similar mosaic, or painted with azure and rich colours; the doors inlaid with ivory, ebony, and other *singularities*; yet the workmanship excelled the materials. Extensive gardens, filled with fruit-trees, surrounded the mansion, and were watered from the Nile night and morning by means of horses and oxen. Such a house, he exclaims, might have cost 80,000 seraps of gold; yet it was but one of a hundred thousand more beautiful still!*

The chief buildings of Cairo, besides mosques and houses, are the street fountains and schools, which are very numerous, and the *khāns* or *wekālas* for merchants. These often go together, as in the *wekāla* of Kāit Bey, of which a description is given in the next chapter (pp. 95—100). The *khān* or *wekāla* is a rectangular building enclosing an open court, and consisting of numerous chambers, which are occupied by merchants who come to the city for a few days' or weeks' trafficking; it is, in fact, the commercial hotel of the East. Stables for the asses and other beasts are on the ground floor inside, and the exterior is commonly fringed with a row of small shops of the usual Eastern pattern—namely, a recess in the wall, some six feet square, furnished with shelves for the goods, and a divan for the seller and purchaser. Similar shops fringe the ground floors of the houses in the principal streets, the upper stories of which have no connection with the shops, but are generally partitioned into lodgings. The shops open only on the street, and, when the shopman goes home, are closed with wooden shutters. The *sebils* or street fountains consist externally of a front of semicircular form, with grated windows and a row of brass pipes, from which water may be sucked by passers-by, or a row of apertures through which they may thrust their arms with a brass cup (which is provided outside) to the tank of water within. Over the fountain is a room, with open arched windows, where a pedagogue instructs the youth of Cairo in the art of reading the Koran, and not much else. These *sebils*, with their schools, are

* Nāsir-i-Khusrau, *Sefer Nameh*, ed. C. Schefer, 133.

pious foundations, and are generally connected with ~~some~~ mosque. The walls of the interior of some of the better style, such as that of 'Abd-er-Rahmān Kikhya or Ketkhuda (18th century), are decorated with earthenware tiles of floral patterns, and often with a bird's-eye view of Mekka, with the Ka'ba and other holy places, represented on the tiles. Such fountains are among the most ornamental features of the streets of Cairo, though most of them belong to the Turkish period of decadence.*

In concluding this brief survey of the chief characteristics of Cairo architecture, it cannot be concealed that the style fails to give complete satisfaction to an eye trained in the contemplation of either the Classical or the Gothic orders. The Saracen builders do not seem to have been possessed with an architectural idea; the leading consideration with them seems to have been not form but decoration. For the details of the decoration it is impossible to feel too much admiration; they are skilfully conceived and worked out with remarkable patience, honesty, and artistic feeling. But the form, of which they are the clothing, seems too often to want purpose; there is a curious indefiniteness about the mosques, a want of crown and summit, which sets them on a much lower level than the finest of our Gothic cathedrals. It is perhaps unfair to judge of them in their more or less ruinous state; yet their present picturesque decay is probably more effective than was the sumptuous gorgeousness of their

* For illustrations of the chief mosques and other buildings of Cairo, consult (besides Coste and Prisse d'Avenne) Ebers' *Egypt*, where there are some admirable interiors of houses after Mr. Frank Dillon's pictures, besides good views of various portions of the mosques of El-Miridāny (i., 202, ii., 70), the Märistān, &c. (i., 247, 249, 250), Sultan Hasan (i., 238, 262, 268), El-Muayyad (i., 273, 274), El-Isk (i., 281), Kūt Bey (i., 284), and El-Ghōry (i., 286). My Egyptian chapters in *Picturesque Palestine, Sinai, and Egypt*, vol. iv., contain ~~some~~ fine woodcuts of El-Ashraf Bars Bey (142), Sultan Hasan (143), Barkūk (145), Kūt Bey (148), and others, with useful street views; and in the supplementary volume, *Social Life in Egypt*, are illustrations of El-Hākim's minarets (90), Kalaūn's mausoleum (91), Sultan Hasan (95), and Kūt Bey (99-101), besides many objects of Saracenic Art from the Cairo museum.

colours and ornament when new. The want of bold relief in the ornament is one of the most salient defects to us of the north; we find the surfaces of the mosque exteriors flat and monotonous. The disregard of symmetry is another very trying defect to eyes trained in other schools of architecture; the windows, minarets, &c., are scattered with no sense of balance; and the dome, instead of crowning the whole edifice covers a tomb at the side of the building, and thus infallibly gives it a lopsided aspect. It is chiefly to the grace of their minarets, the beauty of their internal decoration, and the soft effects of the Egyptian atmosphere upon the yellowish stone of which they are built, that the mosques of Cairo owe their peculiar and indestructible charm. A charm they have undoubtedly, which is apparent and fascinating to most beholders; but it is due, I believe, to tone and air, to association, to delicacy and ingenuity of detail, and not to the architectural form. Franz Pasha, the architect to the Khedive's Government, himself a fervent admirer of what is really excellent in Saracenic art, has the following criticism on the architecture: "While bestowing their full meed of praise on the wonderfully rich ornamentation and other details of Arabian architecture, one cannot help feeling that the style fails to give entire aesthetic satisfaction. Want of symmetry of plan, poverty of articulation, insufficiency of plastic decoration, and an incongruous mingling of wood and stone are the imperfections which strike most northern critics. The architects, in fact, bestowed the whole of their attention on the decoration of surfaces; and down to the present day the Arabian artists have always displayed far greater ability in designing the most complicated ornaments and geometrical figures on plane surfaces than in the treatment and proportioning of masses. Although we occasionally see difficulties of construction well overcome, as in the case of the interior of the Bâb-en-Nasr, these instances seem rather to be successful experiments than the result of scientific workmanship. The real excellence of the Arabian architects lay in their skill in mask-

ing abrupt angles by the use of stalactites or brackets. If we inquire into the causes of these defects in the developments of art, we shall find that the climate is one of the principal ; its remarkable mildness and the rareness of rain have enabled architects to dispense with much that appears essential to the inhabitants of more northern latitudes ; and hence the imperfect development and frequent absence of cornices. The extraordinary durability of wood, again, in Egypt has led to its being used in the construction of walls and in connection with stone, in a manner that would never occur to northern architects. Another cause, unfavourable to the development of native art, has doubtless been the ease with which the architects obtained the pillars and capitals in ancient buildings ready to their hand."*

The architect goes on to point out how political changes, and the respect for traditional forms, and the superstitious dread of the evil eye, bearing upon external display, have combined to arrest the development of Cairo architecture. There is much that is penetrating and just in this criticism ; but it is clearly the criticism of a northern artist. We have come to regard certain architectural features, such as cornices, as essential, which an eastern would regard as superfluous, and our eye is biassed by what it has been accustomed to see in Europe. The main criticism, however, stands good, that the beauty of the mosques of Cairo is not so much architectural as decorative, and no prejudice can be accounted a sufficient reason for disregarding this defect.

Nevertheless, when all has been said, the mosques and older houses of Cairo possess a beauty of their own, which no architectural canons can gainsay. The houses in particular, by their admirable suitableness in all respects to the climate of Egypt, their shady, restful aspect, and subdued light, must take a high place among the triumphs of domestic architecture. We may detect a lack of meaning in this feature and in that, but we are

* Franz Pasha, in his admirable essay prefixed to Baedeker's "Lower Egypt."

forced to admit that the whole effect is soft and harmonious, sometimes stately, always graceful, and that the Saracenic architecture of Cairo, whatever its technical faults, is among the most characteristic and beautiful forms of building with which we are acquainted.

The following list of the principal mosques of Cairo still existing will be useful for reference. Considering that there are some three hundred mosques in Cairo, to say nothing of *zāwiyas* (or chapels), a complete list would be somewhat cumbrous; but the majority of these edifices are comparatively modern and of little pretension to architectural merit, which forms the sole consideration from our present point of view. El-Makrīzy, in his "Topography of Cairo" (*Khitat*), written about the year 1420, enumerates 86 *gāmīs* (or congregational mosques, where the Friday prayers were said), 75 *medresas* (or collegiate mosques, where lectures were delivered), 19 *mesgids* (or small mosques), 22 *khāngāhs* (or monasteries), 26 *zāwiyas* (or chapels), 34 mausoleums in the Karāfa, and 5 *mārīstāns* (or hospitals); in all 279 mosques or mosque-like edifices. But this is something of a cross division, for many of the *medresas* and *mārīstāns* were attached to a *gāmī*, and really formed one building with it. A large proportion of the mosques described by El-Makrīzy still remain, but many of them are in advanced stage of decay. The following comprise the best specimens of the different periods, so far as they still present fairly preserved architectural details.

PRINCIPAL MOSQUES STILL EXISTING IN CAIRO.

A.H.	A.D.	
20.	640.	' <i>Amr</i> . Frequently restored; e.g. in A.D. 1049, by El-Mustansir; in 1172 by Saladin; after the earthquake of 1302 by En-Nāsir. Little of the original building is left.
265.	878.	<i>Ibn-Tūlūn</i> . Restored by Lāḡin, 1296.

A.H.	A.D.	
361.	971.	<i>Azhar</i> . Injured by earthquake of 1302, and restored by Salār and Suyurghatmish; again by Sultan Hasan in 1360; by Kāit-Bey; and by Kikhya in 1753. Little of the original building is left.
380-403.	990-1012.	<i>El-Hākīm</i> . Injured by earthquake, 1302; restored in the next year by Beybars II.; again by Sultan Hasan in 1359; and again in 1423.
608.	1211.	<i>Esh-Shāfi'y</i> (mausoleum). Built by El-Kāmil; restored by Kāit-Bey, El-Ghōry, &c.
647.	1249.	<i>Es-Sālīh</i> (mausoleum). Injured by earthquake, 1302, and restored by En-Nāsir.
667.	1268.	<i>Edh-Dhāhir</i> Beybars I.
683.	1284.	<i>Kalaūn</i> (Māristān). Minaret destroyed by earthquake, 1302, and rebuilt.
687.	1288.	<i>Kalaūn</i> (Kubba).
698.	1298.	<i>En-Nāsir</i> .
706.	1306.	<i>Beybars II. Gāshenkir</i> .
718.	1318.	<i>En-Nāsir, in the Citadel</i> .
723.	1323.	<i>Sengar El-Gāwaly</i> and <i>Salār</i> , joined.
739.	1338.	<i>El-Muridāny</i> . (Architect, El-Mu'allim Es-Suyūfy).
748.	1347.	<i>Aksunkur</i> . Restored by Ibrāhīm Aghā in 1652.
756.	1355.	<i>Sheykhū</i> .
757.	1356.	<i>Suyurghatmish</i> .
760.	1358.	<i>Sultan Hasan</i> .
770.	1368.	<i>Umm-Sha'bān</i> .
786.	1384.	<i>Barkūk</i> . (Architect, Cherkis el-Haranbul.)
808-813.	1405-1410.	<i>Barkūk, in the Karāfa</i> . Built by 'Abd-el-'Azīz and Farag, sons of Barkūk. (Architect, Lāgin Tarabay (?).)

A.H.	A.D.	
823.	1420.	<i>El-Muayyad</i> . In process of restoration.
827.	1423.	<i>El-Ashraf Bars Bey</i> . Also mausoleum in the Karâfa.
860.	1456.	<i>El-Ashraf Inâl</i> , in the Karâfa.
877.	1472.	<i>Kâit Bey</i> , in the Karâfa. Also mosque within Cairo.
886.	1481.	<i>Kigmâs</i> , <i>Amir Akhîr</i> .
905.	1499.	<i>Eshék</i> .
909.	1503.	<i>El-Ghōry</i> (two). Restored 1883.



FIG. 14.—ROSETTE IN MOSQUE OF SUYURGHÄTMISH.
Fourteenth Century



CHAPTER III.

STONE AND PLASTER.

IN the preceding chapter we have endeavoured to point out the chief modes of decoration in mosques and houses, and the parts selected for ornament. This selection seemed a little capricious. It ~~was~~ natural that the sanctuary, or east end of the mosque, should be the special subject of the artist's skill, but it is undoubtedly a defect that this skill should have been devoted so exclusively to this and other fixed points of the building. The bareness of the three other transepts of the mosque of Sultan Hasan is only rendered more conspicuous by the marble and other decoration of the east end, and even there the elaborate ornament of the dado is likely to throw the plainness of the roof into the greater prominence. So in the treatment of the exterior, the portal engrosses the attention of the architect, to the comparative neglect of the walls. This is, however, characteristic of Cairo art, and it has its merits. It would have been less usual to devote so much skilful work to the selected portions if the whole surface had been similarly treated; we should have had a general meagreness of ornament. We have now to consider the details of the ornament of which the position alone was indicated in the last chapter.

We saw that in the great mosque of Ibn-Tūlūn the chief ornament consisted in borders of floral designs running round the arches, forming friezes above them, and connecting them at the spring. These were made of plaster or stucco, worked with a tool when in

a moist state, and never cast in moulds. The difference is very striking; the softness and flexuous grace of the hand-moulded patterns being in strong contrast to the hard uniformity of the Moorish mechanical castings. The borders of Ibn-Tūlūn are the earliest examples that have been found of the geometrical designs and scroll work which afterwards became so characteristic of Saracenic ornament. "The scroll-work may possibly be traced to Byzantine work, but in this building it has assumed an entirely distinct character. It is the ornament which thenceforth was gradually perfected, and its stages may be traced in the mosques and other edifices of Cairo through every form of its development. But in this, its first example, it is elementary and rude, and therefore all the more remarkable. Its continuity is not strongly marked, its forms are almost devoid of grace. In later and more fully developed examples, each portion may be continuously traced to its true root—constituting one of the most beautiful features of the art—and its forms are symmetrically perfect."* The principal pattern of the stucco or plaster borders of the mosque of Ibn-Tūlūn consists in a modification of the "knop and flower" pattern which is so familiar in every branch of decoration. Almost the same design is found in ancient Egyptian wall-paintings at Thebes, and also in the Assyrian ornament of Khor-sabad.†

Plaster ornament is a sign of early date, though it would be difficult to assign a satisfactory reason for this. The art of carving marble had certainly been known in Egypt long before the

* E. Stanley Poole, in an essay on Arabian architecture appended to Lane's *Modern Egyptians*, 5th ed. This sketch of my Father's was the first serious attempt to deal with the problems of the origin and development of Saracenic art in Cairo.

† Compare the illustrations on pp. 306 and 307 (vol. i.) of Perrot and Chipiez, *The History of Art in Chaldea and Assyria*. The knop and flower pattern is there seen combined with rosettes closely resembling those of Ibn-Tūlūn. See also Mr. Wild's drawings of the decoration of Ibn-Tūlūn in the *Grammar of Ornament*.



FIG. 15.—ROSETTE IN MOSQUE OF SULTAN HASAN.
Fourteenth Century.

Saracens set about building mosques, and the Copts have marble pulpits and other works of early date. Nevertheless, as a fact, the earlier mosques are generally ornamented with plaster designs. The century after that of Ibn-Tūlūn is represented by the Azhar, built in 971, of which the only certainly original remnants consist in the central arcades of the sanctuary, and these are adorned with Kūfy friezes of the true Fātimy character, and arabesque ornament, all in plaster; in the eleventh we have that of El-Hākīm (1012), which was decorated in plaster, though few traces of this now remain. After these two Fātimy mosques* there follows a wide interval before any considerable mosque offers sufficient remains to enable conclusions to be drawn. What was formerly visible of the Kāmiliya, built by El-Kāmil, nephew of Saladin, in 1224, showed plaster decoration; and the simple arabesques of the mosque of Edh-Dhāhīr Beybars, *extra muros* (1268), are of the same material. But the most perfect example of plaster ornament in Cairo is in the mausoleum of Kalaūn, A.D. 1284. Here the borders of the tall arches supporting what was once the dome, the borders of the clerestory windows above, and an infinity of other decoration, are wholly of plaster, and nothing more delicate and lace-like can be imagined. The bud surrounded by leaves again forms a central idea, but it is developed until it is scarcely recognizable, and the designs are chiefly characterized by a broad treatment of large foliage, worked round into a scroll-like continuous pattern. Continuity is a leading quality of these designs: it would be difficult to break off at any given point in the borders.

Plaster work continued to be used by En-Nāsīr Mohammad, the son of Kalaūn, in his two mosques, but this appears to have been nearly the last occasion (1318) of the general employment of plaster in a considerable mosque. Before the building of Sultan Hasan,

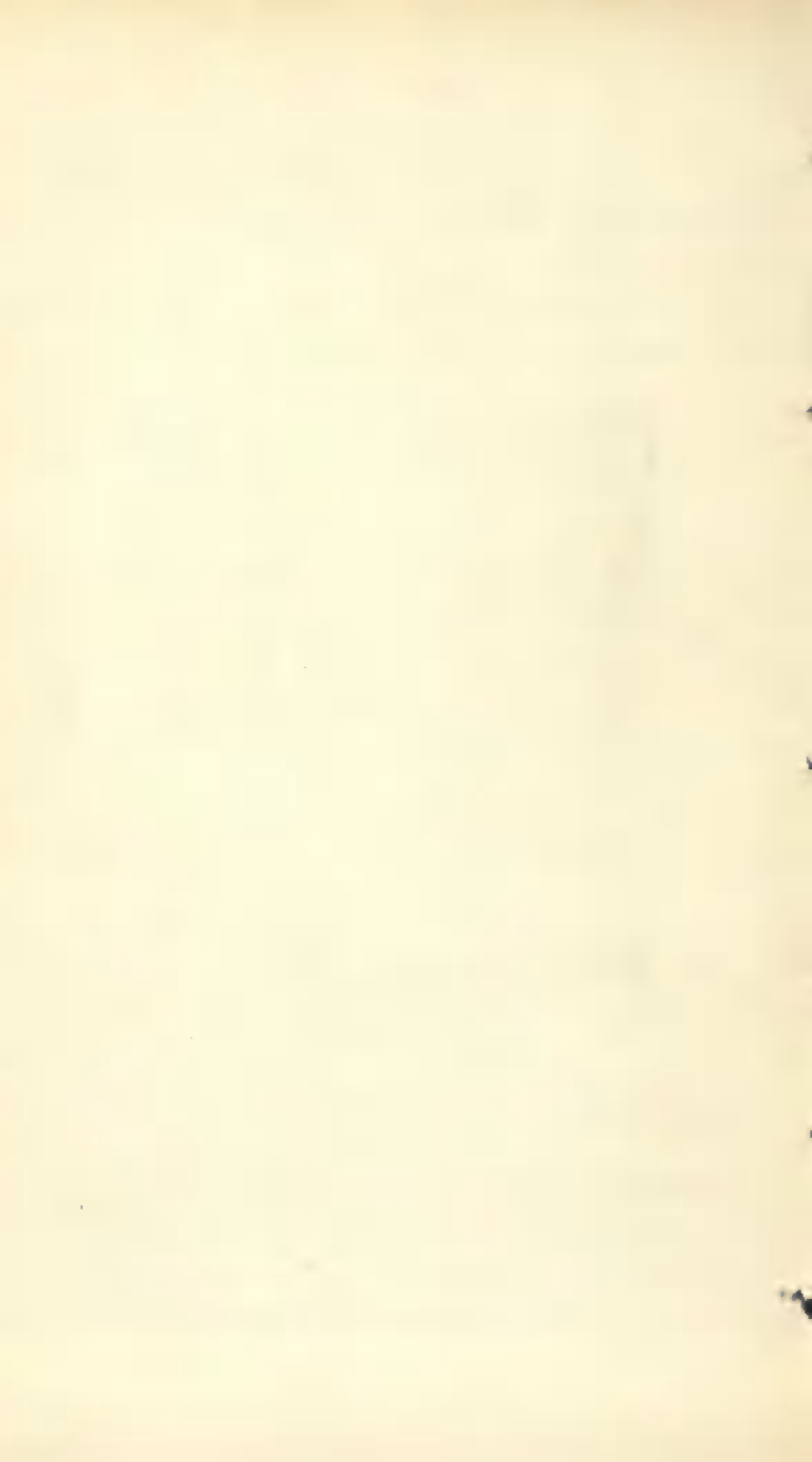
* There are also some remains of tenth century Fātimy work in the mosque of Talāī' ibn Rūzeyk; but most of the ornament belongs to the restoration by Bektemir in the fourteenth century.

in 1356-9, stone had begun to take the place of plaster (see fig. 14). Sultan Hasan's mosque is entirely of stone facing, though, as we have seen, brick was used for the roofs of the arches or transepts, and similar internal surfaces. The ornaments, whether geometrical, scroll, or arabesque, are cut in stone or marble. The chief border of the portal consists of a bud and leaf pattern (fig. 8, page 67), obviously developed from the simple outline seen in Ibn-Tūlūn, and not nearly so complicated as the borders of Kalaūn. Probably stone was a new material to the sculptors, and was found less easy to manipulate than plaster, and the design was consequently simplified as far as possible. The rosettes at the foot of these borders are particularly fine; broad in design, yet simple and easily disentangled. The leading idea (fig. 15) is a circle of buds or flowers, joined by intertwined leaves and tendrils, and arranged in a radiating pattern round a central whorl or star. The pure self-contained arabesque is hardly found in Sultan Hasan; but the geometrical pattern arranged in a square is seen in a very fine manner. A double line, interlaced, forms the border of the square, and, at the interlacings, lines shoot out so as to form a broken pentagon, and other lines projected from this pentagon meet in the shape of a five-rayed star. The junctions of the lines are however somewhat forced; they are not natural prolongations, such as we see in the later and more perfect developments of the geometrical ornament, but break off at unexpected angles.

The stone pulpit (fig. 16), erected in 1483 by Kāit Bey, in Barkūk's mosque in the eastern Karāfa, a unique work, is among the most splendid examples of stone chiselling that can be seen in Cairo. Its shape is triangular, like the wooden pulpits to be described hereafter: but, instead of the sides being filled with geometrical mouldings containing numerous panels chased and inlaid with ivory, the whole of the pulpit is of stone slabs, and the geometrical designs and the ornament which fills the interstices are all chiselled in stone. The design



FIG. 16.—STONE PULPIT IN MOSQUE OF BARRUK.
Early Fifteenth Century.



springs from a rosette of sixteen six-sided panels, the lines of which produced in radiate form towards the centre make a star-like ornament, which is filled with an arabesque design; and being similarly produced outwards cover the whole surface with a network of interlacing lines, which eventually combine into other half-rosettes bisected by the edges of the pulpit.* The interstices

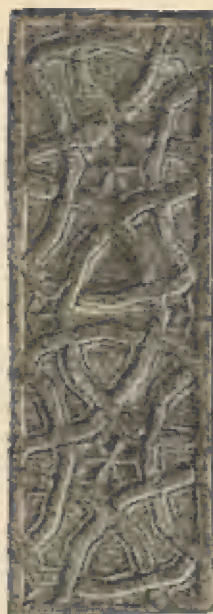


FIG. 17.

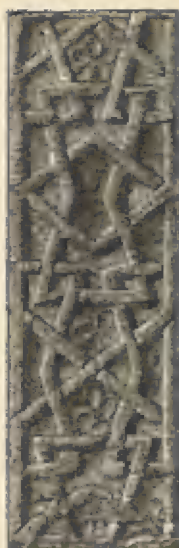


FIG. 18.

GEOMETRICAL ORNAMENTS FROM THE WERĀLA OF KĀIT BAY (c).

between these interlacing lines are filled with admirably drawn floral arabesques consisting of little more than a single conventional flower with a simple border formed by developments of its extremities or with that of a simple rosette flower. The triangular

* M. Bourgoin has made an exhaustive study of the geometrical ornament of the Sarcens in his *Éléments de l'Art Arabe*.

side is divided from the bannister part by a looped double line and a border of delicate floral scrollwork ; and the bannister portion, or side of the staircase, is of six large square panels divided by narrower upright panels of floral scrollwork, and a central panel of arabesque. The large panels are ornamented, four with arabesque patterns, and two with geometrical designs arranged round a central star. The whole side of the pulpit is made in about twelve slabs, which are so well joined that only in two or three parts are the joints distinctly visible. The canopy and other parts are also carved stone.

It is, indeed, in the buildings of the Sultan Kâit Bey (1468-96) that both the pure arabesque and the finest geometrical ornament are seen in their perfection. This prince of Cairo builders allowed no portion of his edifices to be neglected, and the countless ornaments which were lavished upon his mosques and other erections were all cut in good limestone or marble. The arch of the sanctuary in his mosque *intra muros* is a good example of the richness of this ornamentation. It is about 30 feet from the floor to the keystone, and is placed in a square wall about 39 feet high. Nine courses of plain stone, alternately coloured red, form the pier of the arch, on which is a capital formed of three tiers of stalactites. From this the arch springs with a slight projection beyond the capital, owing to its incurved horse-shoe form. The arch is formed by twenty-three courses of stone, on either side, alternately red and white, and a red keystone. Each of the white stones is carved with arabesque and geometrical patterns, arranged alternately. The arabesques are of a prevailing type, consisting of a trefoil or fleur-de-lis surrounded by leaves very beautifully interlaced. The design is, however, varied, and I doubt if any two stones would be found to tally exactly. The geometrical patterns consist of interlacing lines, forming irregular pentagons and hexagons, with little apparent regard to symmetry, though they are all related to one another in the general plan. The arch is enclosed in a raised moulding, which forms a loop at



FIG. 19.—ARCHED ORNAMENT OF THE WEKALA OF KAIT REY. 14h.
Fifteenth Century.

the top, in which is carved a whorl of eight rays. The spandrels of the arch are filled with a bold arabesque design, enclosed in trifoliate borders, and in the centre of each is a circular medallion inscribed with the name and titles of the Sultan and a prayer for his success, arranged in three lines. These medallions are frequently seen in Cairo, and are generally filled with the name of Kâit Bey, though other Sultans adopted the same method of putting a seal on their works. It is interesting to note that a similar arrangement of the Sultan's titles within a medallion is seen on the fourteenth century glass lamps, and also on the gold coins of the Burgy or Circassian Mamlûks. A broad band of Arabic inscription, from the Korân, divided by arabesque panels, forms a frieze at the top, over which is a carved cornice. The whole effect of this arch, and of all the internal decoration of this beautiful little mosque, is extremely rich and finished: and it would be hard to point out a space unoccupied by some delicate design.

Among the buildings of Kâit Bey, none is more fruitful in designs chiselled in stone than his Wekâla or Khân, on the south side of the Azhar mosque. This magnificent building was only a sort of hotel for travelling merchants, but its external ornamentation is superb, and in no single building in Cairo do we find so many varieties of arabesque and geometrical design in such perfect preservation. The Wekâla consists of a spacious rectangular court, surrounded by lodgings for the merchants and their beasts. Unhappily, the interior is in confusion, and has long been deserted: heaps of crumbling stone and rubbish cumber the court, which was once no doubt surrounded by walls as carefully built and ornamented as the exterior. The front, however, facing the Azhar, is fortunately in a fine state of preservation, and deserves a thorough study. When I was in Cairo in 1883, I took casts of the ornament of this front, and was fortunately able to bring back paper squeezes, fortified with layers of gipsum, of every distinct ornament on the whole façade. From these squeezes plaster casts have been made,

and a set of these are exhibited in the gallery over the architectural court of the South Kensington Museum. The difficulty of obtaining every variety of design was less than it would have been in a work of an earlier date; for by the time of Kaït Bey the beauty of uniformity had been learnt, and the honest custom of the old workmen, never to repeat a design, had given place to a decorative system which while it encouraged variety approved of a certain symmetry and recurrence in the patterns. The whole number of designs in the long front of the wekala of Kaït Bey does not exceed twenty-two, if the end and doorway are not reckoned, although round the shops which run along the ground-floor of the façade there are no fewer than 120 panels of ornament.

The front of the Wekāla is decorated only on the ground-floor; the upper stories, save for small windows, are left unadorned. The ground-floor, however, makes amends for the shortcomings of the superstructure by its wealth of ornament. It consists of a row of thirteen shops, divided between the seventh and eighth by a splendid arched gateway,* the finest feature in a singularly fine building. This gateway is set in a recess, the jambs of which are coloured in the usual red and white stripes. The arch is broad, giving an opening of about eight feet, and pointed, and the edge is composed of stalactites in three tiers, with their surfaces carved with arabesque designs. Round the facing, above, runs a beautiful scroll border, like a wreath of roses, which forms a loop above the keystone, within which is inscribed the name of God. The same scroll border frames the spandrels. The recess in which this arch is set is brought back to the face of the front by vaulting; but in this case, instead of the common rows of stalactites, or simple arching, the depth being considerable, the vaulting is effected by a deep trefoil arch, of which the vault is formed by three smaller bays sup-

* This gateway is illustrated by Coste, *Architecture Arabe*; but the details are a little imaginative.



FIG. 20.—GEOMETRICAL ORNAMENT OF THE WEKALA OF KAIT BEY. $\frac{1}{2}$ th.
Fifteenth Century.

Face p. 96.



porting an upper bay. The side bays below are filled with stalactites, which seem to constitute natural corbels on which the superstructure rests; and the surfaces of the stalactites and the spare spaces at their sides are covered with arabesques. The base of the upper bay is worked with little shell patterns, and its back is ornamented with a sparse scroll ribbon, resembling somewhat the rose border below, arranged in zigzags. The alternate courses of the stones forming the edge of the upper bay are also carved, and the whole trefoil outline of the vaulting is enclosed in a double line, looped at intervals, outside which the spandrels are filled with arabesque designs.

The shops on either side of the great gateway are not unlike most other shops in Cairo. They are uniform recesses about six or seven feet high, and four to five wide; but they are surrounded with ornaments such as few other shops in Cairo can boast. Over the shop, forming a species of eave or fringe to the recess, is a wooden panel (*a*) bearing the name of Kait Bey, in medallion form, with other carved or lattice panels, most of which have been destroyed or stolen. One or two are now in the South Kensington Museum. Over each shop is first an oblong panel (*b*) of shallow arabesque carving, the full width of the recess forming the shop, and rather over two feet high. At each side (figs. 17, 18) of this, dividing it from the similar panel over the next shop, is a narrow upright geometrical panel (*c*). Over each of the horizontal panels is a sort of arch (*d*), composed of nine small upright panels, (fig. 19) arranged so as to form an arch on the lower side and a straight line at the top, of the same width as the horizontal panel below. The four side panels (*e*, *f*, *g*, *h*) are counterparts each of the opposite one, though each is different from its neighbour, and the same four panels, with their counterparts or reverses, do duty for all the arched panels (except two or three which are covered with a continuous arabesque device, instead of being thus subdivided into nine pieces); the keystones (*i*, *k*) however are not identical over the several shops, but three different patterns are

used. Between each of these arched panels and the next is a circular medallion (*e*) with the name and titles of Kāit Bey, of the kind already described. The subjoined outline will explain the arrangement:—

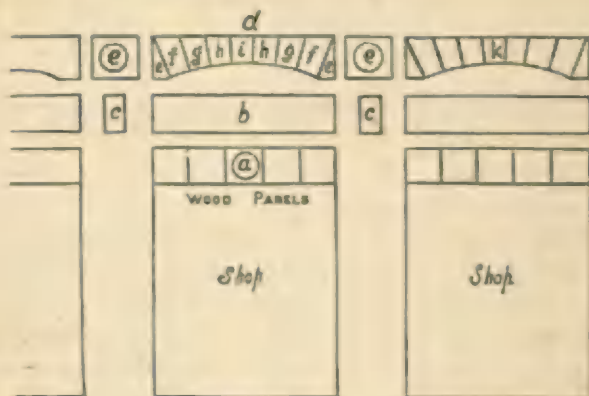


FIG. 21.—ELEVATION OF PART OF THE SHOP-FRONTS OF THE WEKĀLA OF KĀIT BEY.

At the right-hand corner of the Wekāla is a Sebil or fountain with two large grated windows, one at the front, the other round the corner, each set in a border of wooden scroll-work, and surmounted by arabesque panels; and at the corner an engaged column is hewn in the wall, with a round base composed of two drums like a dice-box, a shaft of ten drums, carved with arabesque and geometrical patterns and an Arabic inscription, and a stalactite capital; and above and on either side of the capital are geometrical panels (fig. 20) in the wall.*

Between the Sebil and the shops is a small doorway, leading up to the school which surmounts the fountain. This little door has a square above it marked out by a double line, looped at intervals, and subdivided into nine rectangular compart-

* A plaster cast of this column is in the South Kensington Museum.



FIG. 22.—ARABESQUE ORNAMENT OF WERKALA OF KAIT BEY. 3th.
Fifteenth Century.

ments by the same means, each of which has its geometrical device, matching on opposite sides, except one in the centre, which is occupied by a small grated window. Over this square is a splendid rosette (fig. 25) of arabesque ornament, enclosed by four spandrils of the same pattern. Beyond the sebil, the portion of the Wekāla which stands back from the street is occupied by another



FIG. 23.

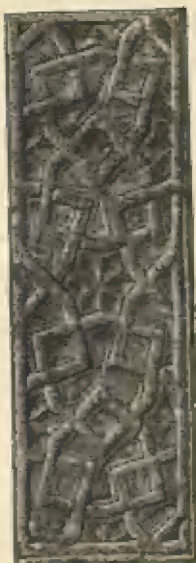


FIG. 24.

GEOMETRICAL ORNAMENTS OF THE WEKĀLA OF KĀT RAY (1th).

door, surmounted by a trefoil vaulted arch, over which is a meshrebiya window.

Many of the ornaments of this noble building are engraved in this volume. The illustration (fig. 19) shows the arch (*d*,) with its nine panels, seven of which exhibit the true self-contained arabesque, complete within the space it occupies, and formed by

the knot-like interlacing of two loops, ending in trefoil heads; whilst two show the characteristic geometrical design of Kāit Bey, triangular (essentially, though with a fourth angle in the base) figures linked together, and the intervals ornamented with cinquefoils. The two varieties of side panels (c) are shown in figs. 17 and 18. Some of the larger ornaments, e.g., half of an arabesque panel and half the geometrical design over the corner column, are shown in figs. 20 and 22, where figures of four sides are linked together and ornamented with stars. The rosette over the small door and two small upright panels adjoining it are shown in figs. 23-5, and two examples of geometrical and arabesque patterns from the same façade appear in figs. 26 and 27.

The stone and plaster work of Cairo is, as has been seen, chiefly surface decoration, of an even or flat tone, which has little or no constructive meaning, and seems to be more or less derived from the patterns which were used for the decoration of textile fabrics. The stalactite or pendentive bracketing, however, is strictly constructive, and forms a strongly marked characteristic of Saracenic art (see fig. 10). Its first and principal use is for masking the transition from the square of the mausoleum to the circle of the dome. "In their domes the Arabs adopted, and improved on, the constructional expedient for vaulting over the space beneath, and passing from a square apartment to the circle of the dome, used by both Byzantines and Persians. The church of St. Sophia, at Constantinople, presents fine examples of its Byzantine form; but in later edifices of that style, constructional difficulties seem to have confined the architects to small domes. The buildings of the Sassanian dynasty also contain pendentives.* . . The Arabs, with their peculiar faculty for cutting away all superfluous material,

* The origin of the pendentive may be traced in the rude brick-work, projecting course above course, in the corners of the Kertsch tumulus, of which an illustration is given in Lane's *Modern Egyptians*, Appendix F, 587.



FIG. 25.—ROSETTE OF THE WERALA OF KAIT BEY.
Fifteenth Century.

Face p. 100.

naturally arched the overlapping stones that filled up the angles of the building; and, by using *pointed* arches, overcame the difficulty of the Byzantine architects to which I have alluded. The pendentive was speedily adopted by the Arabs in Egypt in a great variety of shapes, and for almost every conceiv-



FIG. 25.—ARABESQUES OF THE WEKALA OF KÄIT BEY (16th).

able architectural and ornamental purpose: to effect the transition from the recessed windows to the outer plane of a building; and to vault, in a similar manner, the great porches of mosques, which form so grand a feature characteristic of the style. All the more simple woodwork of dwelling-houses was fashioned

in a variety of curious patterns of the same character; the pendentive, in fact, strongly marks the Arab fashion of cutting off angles and useless material, always in a pleasing and constructively advantageous manner."*

* E. Stanley Poole, in Lane's *Modern Egyptians*, 5th ed., pp. 586—588.

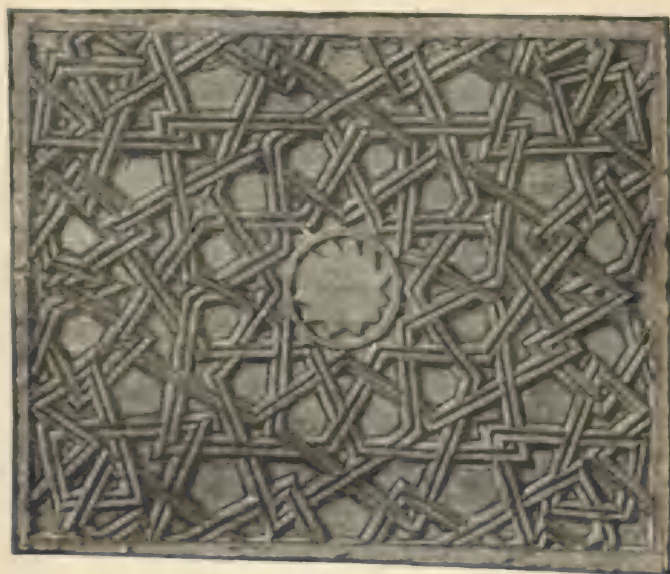


FIG. 27.—GEOMETRICAL ORNAMENT ON THE WENĀLA OF KĀST DEY (14th).

CHAPTER IV.

MOSAIC.

AMONG the modes of decorating specially honourable parts of the mosque or house, none was more esteemed in Cairo than mosaic work, and none was practised with greater success. By mosaic, we understand the combination of small pieces of hard substances of different colours, to form a pattern for a wall or pavement. As hard substances are numerous, and the manner of combining them is susceptible of considerable variety, the term mosaic embraces a wide range of artistic processes. Of these the most familiar is the glass mosaic of Byzantium and Ravenna, in which cubes of glass, rendered opaque, and coloured with various tints, are so arranged as to represent figures of saints. Another kind of mosaic, scarcely less celebrated, is the well-known tessellated pavement of the Romans, of which there are many examples in England, where the pattern is formed by the combination of cubes and other small pieces of marbles of different colours. There is also a sectile mosaic, called Florentine, where the coloured marble is used as a sort of veneer, and backed by stouter but common material. The "*Opus Alexandrinum*" consisted of small geometrical pieces of coloured marbles set into a marble ground.

Saracenic mosaic, in Egypt, is a combination of the tessellated method with the larger proportions of sectile mosaic; but it does not exactly coincide with any of the usual European processes. In its most familiar application, as a dado about

four feet high, running along the wall of the sanctuary of a mosque, or round a principal room in a palace, it consists of upright slabs of marble of different colours and different widths, so arranged as to form a series of rectangular panels, divided and framed by narrower bands. Thus the tomb-mosque of El-Ghōry, built in 1503, has a niche inlaid with blue, yellow, and red marbles, in zigzag stripes, while the double dado on either side of it, running the whole width of the south-east wall, in two lines, one high up, the other low, is of red, yellow, and black marbles, arranged in square or oblong panels, the black forming the pattern, and the red and yellow the centres and borders of the design. The niche of Kalāṭin has black, red, and yellow mosaic, picked out with little spots of blue tile. It is not uncommon to find fragments of tile thus used in combination with marble or earthenware: there are two specimens of this curious style in the South Kensington Museum (1499, 1499a). A more usual mode of varying the monotony of the tall slabs of marble and their narrower margins was by introducing between them a border of tessellated work, made of small cubes of marbles of various colours, mixed with red pottery or blue enamel, and frequently with mother-of-pearl. The contrasts between the different colours of marble, pottery, and glass, and the iridescence of the mother-of-pearl, give this peculiar class of mosaic a beauty of its own, which will bear comparison with any other kind of inlay. A fine example, from the St. Maurice collection, is now in the South Kensington Museum, and is engraved in fig. 28. It consists of three panels, enclosed in borders; the central panel is of rich porphyry, bordered with white and black marble, and with a geometrical edging of mother-of-pearl filled in with red pottery and yellow marble; the side panels are of streaked red marble within similar borders; and the whole is enclosed within a rim of greenstone. This triple panel was, no doubt, one of a series which formed the dado of a mosque or palace. Dados of this kind of mosaic are found in the mauso-



FIG. 28.—MOSAIC DADO, $\frac{3}{4}$ h.
[South Kensington Museum]



leums of Kâit Bey and El-Ashraf, in the eastern cemetery, and beautiful examples of red marble inlaid with blue glass and mother-of-pearl are seen in the ruined sanctuary of the mosque of El-Mâridâny.

This is the specially characteristic mosaic of Cairo, and it will be at once recognized as distinct from the mosaics of Europe. It is made of natural marbles and mother-of-pearl, with only a sprinkling of such manufactured substances as pottery or glass enamel; it is arranged in geometrical designs, with no attempt at representing human or other figures; and it is fixed in a



FIG. 89.—MOSAIC EMBLEM (1stth).

(*South Kensington Museum.*)

plaster bed, and not inset, like the "Opus Alexandrinum," into a marble matrix. These are the salient points of the Saracenic mosaic; and the minuteness and delicacy of the tesserae, the intricacy of the designs, and the lustre of the mother-of-pearl, combine to produce an exquisitely beautiful effect.

Precisely similar mosaics are found about the tribunes of the Coptic churches, and there is every reason to believe that the art is essentially a Christian one, preserved by the Copts in Egypt from very early times, while in the west it was suffered to die out

and be supplanted by the Byzantine glass mosaic. Eusebius's mention of variegated marbles on the walls of the church of St. Saviour at Jerusalem, in A.D. 333, seems to point to this form of mosaic, which would thus be traced back to the fourth century. Surviving specimens are, however, mainly found in Egypt; and the chief example in Europe is the apse of Torcello, the mosaics of which closely resemble the niche of a mosque or the tribune of a Coptic church at Cairo.*

The manner in which mosaics of this description were put together and set up against the wall was as follows:—Each piece of marble or tessera of this or other material, having been bevelled from face to back (as below), the whole mosaic is laid out on the ground, face downwards, and strong plaster is poured over it, which, entering the interstices (shaded in the cut) at the back, binds them



FIG. 30.—MODE OF BEVELLING MOSAICS.

together into one slab. Pieces of reed are then laid across the wet surface to strengthen it, and more plaster is poured on, till the thickness is about two inches. Large surfaces can thus be bound together, lifted, and plastered to the wall, without breakage. The bevelling of the edges not only gives the plaster a grip on the tesserae, but saves labour in fitting the pieces together: for instead of the whole of the sides having to be

* A. J. Butler, *Coptic Churches*, vol. i., pp. 37, 38. That the Egyptian mosaic-work was derived from the art of the Lower Empire is supported by the circumstance that the common Arabic name for a tessera of mosaic is *ḥarṭīṣā*, which is of course the Greek *ἡρτίσις*. The term *ḥarṭīṣ* is also employed in the same sense, and *muḥarṭīṣ* means "inlaid with squares of marble," or "covered with mosaic." The Greek emperor furnished the Khalif El-Welid with mosaics and workmen for his mosque in Jerusalem.

exactly parallel and accurately fitted to the adjoining side, only the faces and the top edges of the tesserae and slabs have to be ground, so as to form accurate junctures at the front alone; and the backs and sides are left quite rough. Tiles are bevelled in the same manner, and this constitutes a general distinction between Eastern and European tiles, for the latter are hardly ever bevelled. The Cairo mosaic worker, who gave Mr. Wild the foregoing account of the method of his art, also stated that no drawings were as a rule made beforehand, but the mosaic was constructed out of the artist's head as he arranged it on the ground.

Two spandrils of a niche in the South Kensington Museum present some peculiarities in colour and materials (884, 884a, St. Maurice). The ground is composed of red pottery, formed from powdered water jars; the geometrical pattern is marked out by lines of mother-of-pearl, and marble and blue enamel is restricted to the small points which form the centres of the geometrical systems; the edging of the whole is of greenstone.

Most of the Mamlūk mosques of Cairo have mosaics in their niches, and in the dado on either side, but the mosaic is not always of the rich and intricate character of the panel engraved in fig. 28. In many of the mosques, notably those of El-Ghōry and Sultan Hasan, the mother-of-pearl and pottery are omitted, and the mosaic consists of marble slabs and borders, in two or three colours. In Sultan Hasan the dado is of black and white slabs, simply arranged—



The pulpit is also constructed of variegated marbles, arranged in medallions, in a European style, with a much less pleasing effect than the usual wooden panelling; and a column is also formed of alternate drums of yellow, white, and black marble.

The mosaic pavements of Cairo are of a somewhat different character from those employed for wall decoration. Naturally such substances as mother-of-pearl and glass are not suited to pavements, where they would offer very inadequate resistance to the feet. The pavements are therefore generally composed entirely of marble tesserae (and sometimes red earthenware), of larger size than the delicate pieces that are included in wall mosaics, and arranged so as to form geometrical patterns within the space of about two feet square. Eighteen squares of this description are preserved in the South Kensington Museum, of which two are engraved in figs. 29 and 31. Each square is made separately, and the pieces are set, not in plaster, but in a composition of lime and clay, impervious to water: the clay must be unburnt, just as it comes from the pit. A slab (no. 490—1872) in the South Kensington Museum is of this composition, inlaid with porphyry, glass, and greenstone. The most common application of mosaic pavements is to the *durkā'a*, or lower floor of a room, which faces the entrance, and commonly contains a fountain. Mr. Wild has preserved drawings of several of these mosaic fountain floors, which would well repay reconstruction in England.*

The marbles most commonly employed in Cairo mosaics are the red, yellow, black, and white varieties, and the red is sometimes very beautifully streaked. It has been generally supposed that these were imported ready polished from Italy, but there is evidence that this was by no means the invariable custom. *Nāsir-i-Khusrau*, who visited Egypt in the eleventh century, in the reign of the *Fātimy Khalif El-Mustansir*, states that marbles were very common at *Rāmla*, near Alexandria, and that the walls of most of the houses there were coated with marble plaques, artistically inlaid, and carved with arabesques. The slabs were cut with a toothless saw and

* An engraving of a mosaic floor, surrounding a fountain of the simpler kind usual in good Cairene houses, may be seen in Lane's *Modern Egyptians*, pp. 12, 13, 5th ed.

Mekka sand, and the colours of the marbles were red, green, black, white, mottled, &c.* The traveller does not state where the marbles came from, in the rough ; but there are certainly no marble quarries near Ramla, unless the ancient temples and other buildings of Roman and Christian times were utilized in this manner. The Mohammadan builders were in the habit of making raids upon the Christian remains of Egypt whenever they were in need of materials for a new mosque. We read how Beybars, when he was building his mosque outside the north gate of Cairo, in 1268, collected marbles from all the towns of Egypt, where no doubt



FIG. 31.—MOSAIC PAVEMENT (17th).

(South Kensington Museum.)

the churches still retained something of their ancient splendour ; while the sanctuary was lined with marbles and carved wood brought from the fortress of Jaffa, which he had just captured at the point of the sword. The majority of the columns used in mosques appear to have been stolen from earlier buildings, and the ancient Egyptian monuments were laid under contribution. 'Abd-el-Latif, the physician of Baghdād, who travelled in Egypt in the year 1200 A.D., tells us how attempts were made to pull down the granite of the Red Pyramid of Menkara, at Giza, for building

* *Sefer Nameh*, ed. Ch. Schefer, p. 65.

purposes, so early as the reign of the Khalif El-Mamūn, in the beginning of the third century of the Flight; and though the attempt failed, and the workmen declared that they could make no impression upon the huge mass, the practice of borrowing stone from the pyramids and temples of ancient Egypt still continued. Hieroglyphic inscriptions are occasionally found on blocks of black diorite and other stones in the mosques, *e.g.* of El-Gāwaly. It is therefore not improbable that the Ramla marble-works were supplied, at least in part, from the older monuments of Egypt, though they may have been reinforced by importation.

The red porphyry, or *rosso antico*, the green-stone or serpentine, and the black diorite and slate, which occur in mosaics, are quarried in the mountains of the Arabian desert, between the Nile and the Red Sea; and alabaster, which was sparingly used in mediaeval times, was found near Asyūt, on the Nile.

CHAPTER V.

WOOD-WORK.

WHEN we remember how little wood grows in Egypt, the extensive use made of this material in the mosques and houses of Cairo appears very remarkable. In mosques, the ceilings, some of the windows, the pulpit, lectern or Korān desk, tribune, tomb-casing, doors, and cupboards, are of wood, and often there are carved wooden inscriptions, and stalactites of the same material leading up to the circle of the dome. In the older houses, ceilings, doors, cupboards, and furniture, are made of wood, and carved lattice windows, or meshrebiyas, abound. In a cold climate, such employment of the most easily worked of substances is natural enough; but in Egypt, apart from the scarcity of the material, and the necessity of importing it,* the heat offers serious obstacles to its use. A plain board of wood properly seasoned may keep its shape well enough in England, but when exposed to the sun of Cairo it will speedily lose its accurate proportions; and when employed in combination with other pieces, to form windows or doors, boxes or pulpits, its joints will open, its carvings split, and the whole work will become unsightly and unstable. The leading characteristic of Cairo wood-work is its subdivision into numerous panels; and this principle is obviously the result of climatic considerations, rather than any doctrine of

* The wood commonly used for lattice windows is the pitch pine, which is imported from Asia Minor in lengths of about twenty feet.

art. The only mode of combatting the shrinking and warping effects of the sun was found in a skilful division of the surfaces into panels small enough, and sufficiently easy in their setting, to permit of slight shrinking without injury to the general outline. The little panels of a Cairo door or pulpit may expand without encountering enough resistance to cause any cracking or splitting in the surrounding portions, and the Egyptian workmen soon learned to accommodate themselves to the conditions of their art in a hot climate.

Wood is the prevailing material employed for the fittings and furniture of a mosque. The furniture is, however, of a much more restricted character than that of a Christian church or

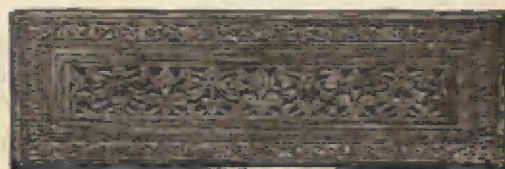


FIG. 32.—CARVED PANEL OF PULPIT (4th).
(South Kensington Museum.)

cathedral. Where the ministers and congregation sit cross-legged on the floor, and in a service where there is no music and therefore no choir or organ, we cannot look for carved chancel-stalls, *misereres*, choir-screens, organ-lofts, or other points of decoration in our more ornate churches. The niche towards Mekka takes the place of our altar, and though it is sumptuously adorned with marbles and mosaic, it does not afford the opportunity for wood-carving which is found in our chancels. Nevertheless, the Mohammadan church has its points of wood-carving. These are the pulpit, the lectern or Korān desk, the doors of the recesses or cupboards which contain the various objects required by the ministers of the mosque; and although there is no choir-screen, in the splendid sense familiar in our cathedrals, the

sanctuary or eastern arcade of the mosque is sometimes railed off from the court by a turned wooden screen. And as many of the mosques of Cairo have chapels, where the founder or members of his family are interred, the Muslim artist would sometimes employ his skill in carving the wooden casing of the tomb with elaborate arabesques, arranged in intricate panels.

The form of a Cairo pulpit, termed in Arabic *minbar* (pronounced *mimbar*), is seen in fig. 34. It represents a pulpit, now in the South Kensington Museum, which bears the name and titles of the Mamlūk Sultan Kāit Bey, who reigned in the last third of the sixteenth century, but the precise mosque from which it came is not known. As one Sultan would

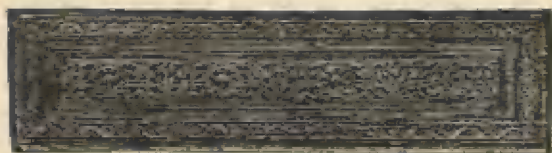


FIG. 33.—CARVED PANEL OF PULPIT (3th).
(South Kensington Museum.)

sometimes place a pulpit in the mosque of another, and Kāit Bey was especially generous in this kind of restoration, it is possible that the pulpit did not come from any of his own mosques; and the tradition is that it belonged to that of El-Muayyad, which, however, has a pulpit of its own, bearing its founder's name. Wherever it originally stood, the pulpit is an admirable example of the typical Cairene *mimbar*. It consists of a staircase, entered through folding doors, and enclosed by high sides, and terminating at the top in a sort of niche, surmounted by stalactites and a copper cupola. The position of the pulpit was always on the left side of the niche, as you look out towards the court, and the doors were turned to face the con-

gregation. The *minbar* is only required during the Friday (or Muslim Sunday) prayers, when the weekly sermon is preached by the Imām or Khatib of the mosque, who is a layman selected from the people of the neighbourhood, and in no special sense a priest. Standing on the topmost step but one, and holding in his right hand a long wooden sword, which is kept for the purpose behind the doors of the pulpit, he delivers the oration of the Friday Service. The reason for the position on the second step is rather curious: Mohammad the Prophet always preached from the top step, and the Khalifs, his successors, modestly descended each a step lower than the preceding, in order to reserve the post of honour to the most worthy. But when two or three steps had thus been descended, it was discovered that the process if continued long enough would land the preacher in the bowels of the earth, and it was accordingly decided to reserve the top step for Mohammad himself, and to preach from the next lower on all future occasions.

The ornament of the pulpit is generally elaborate. Some of the more modern pulpits are indeed very plain, and constructed merely of panelled and painted wood. On the other hand, one *minbar*, erected by Kāit Bey in the mosque of Barkūk, in the eastern burial-ground of Cairo, is of solid stone slabs, admirably carved with arabesques and geometrical designs (fig. 16). But most of the pulpits are like that of Kāit Bey, engraved in fig. 34, and are covered with carving and inlaid with ivory and ebony. The amount of work involved in the complicated arrangement of little panels, each of which is supported in a frame of wood beading, which is itself chiselled and sometimes made in two or three envelopes, must have been very considerable; and the carving of the panels with arabesques of varying designs, no two of which are alike, in work of the best period, must have involved incredible toil and ingenuity. It may be taken as a rule, which is exemplified in most arts, that the older the work is, the simpler, freer, and more varied it is; while

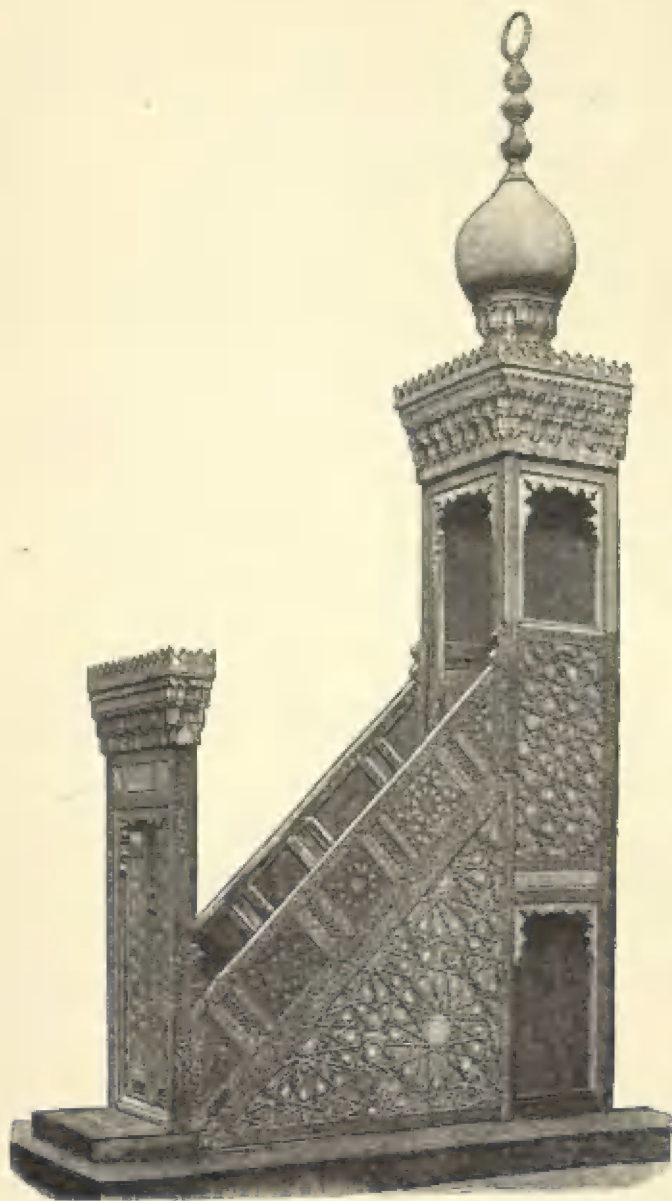


FIG. 34.—PULPIT OF SUITAN KAIT BEY.
Fifteenth Century. (South Kensington Museum.)





FIG. 36.



FIG. 37.



FIG. 35.



FIG. 38.

CARVED PANELS OF LAGIN'S PULPIT, USED IN THE MOSQUE OF IEN-TULUN.
A.D. 1296.

(South Kensington Museum.)

complexity, intricacy, and a tendency to repetition, are signs of a later style.

The specimens engraved in figs. 35—43 will convey a fairly complete conception of the character of this typically Cairene mode of carving. The panels figs. 35—40 originally formed part of a pulpit which the Mamlūk Sultan Lāgīn erected in the mosque of Ibn-Tūlūn in the year 1296 A.D., when he undertook the restoration of this ancient mosque. In the present day there is a very inferior pulpit there, and this must have been introduced when the fine work of which these panels formed part was taken away, by whom we do not know. The removal must however have been effected in comparatively recent times, for when Mr. James Wild, the present Curator of Sir John Soane's Museum, was in Cairo, about 1845, the older pulpit was still standing; and he made a drawing of the geometrical arrangement of the panels, which is still preserved in his sketch-books, and which was turned to advantage some years ago, when the fragments of the pulpit sides were acquired by the South Kensington Museum from M. Meymar. This sketch shows that the side included one large circular geometrical arrangement (comprising eight large octagonal panels, carved alternately with stars and arabesques round a central star), and four half-systems of the same plan, two of which were placed so that their diameters coincided with the edge of the balustrade or border of the pulpit, while the other two touched the back. The balustrade was of open lattice work, something like the narrow open panels in the Kāit Bey pulpit engraved in fig. 34, and the length of the base and back of the triangular portion of the side, occupied by the carved panels, was 15 feet 9 inches. The doors were filled with carved geometrical panels, with the usual arrangement of two horizontal panels, filled with Arabic inscriptions, one above and one below each door, and a longer inscription on the lintel. The pulpit did not arrive in England in its original shape, but consisted merely of a collection of loose panels, which Mr. Wild, with the help of his sketch, arranged in a

square, which now hangs on the walls of the Museum (no. 1051); with the exception of a few pieces which remained over, and some of the horizontal panels, two of which contain the name of the Sultan Lāḡin and the date of the erection of the pulpit, A.H. 696, while others are filled with scroll-work. Two of these are engraved in figs. 39 and 40; one has an arabesque scroll,



FIG. 39.—ARABESQUE PANEL OF LĀḠIN'S PULPIT, ONCE IN THE MOSQUE OF IBS-TŪLŪN
(South Kensington Museum.)

and the other the inscription *الملك المنصور حاتم الدنيا والدين* لاجين "The victorious king, sword-blade of the State and Church Lāḡin." When the Museum acquired the magnificent collection of M. de St. Maurice, in 1884, I was able to identify the fine panels which the late owner had fitted into the frame-



FIG. 40.—PANEL OF LĀḠIN'S PULPIT, BEARING HIS NAME AND TITLES.

work of a modern and ill-proportioned door as portions of the same pulpit, and some of these are engraved in figs. 37 and 38.

The panels of Lāḡin's pulpit show the Cairene carving in its boldest and finest style. Later arabesques may be more delicate and graceful, but no carvers in Egypt excelled those who made this pulpit, in freedom of design and skill of execution. As is



FIG. 41.—CARVED PANELS FROM PULPIT (OF KUSUN²),
Fourteenth Century. (South Kensington Museum.)



usual in the best Saracenic work, no two designs of this pulpit are absolutely identical: some fresh turn, some ingenious variation in the lines of the arabesque, show the independence of the artist from servile copying. The panels are enclosed by two thin lines of light-coloured wood inlaid in the darker wood of the panel, but the borders are not carved in the manner usual in later work, nor is there any ivory inlay.

The next dated examples are the carved panels from the mosque of El-Māridāny, a Mamlūk Amīr of the court of En-Nāsir ibn Kalāūn, which was built in the year 739 of the Hijra, A.D. 1338. These panels are partly comprised in the top of a French table belonging to the collection of M. Meymar, now in the South Kensington Museum, and the setting and beading is modern; but the geometrical panels are fortunately intact. Horizontal panels, which must have been originally placed above and below the carved doors of this pulpit, or over the little doors of the side cupboard (such as is seen open in fig. 34), present the following inscription twice over:—

ذخر الأراميل والمنقطعين | كهف الفقرا والمساكين |
العبد الفقير إلى الله تعالى | الطنبغا القاضى الملكى الناصرى |

"Provider for the widowed and destitute, Refuge of the poor and miserable, The humble servant of God most high, Altunbugha, the cup-bearer, the [Mamlūk] of El-Melik En-Nāsir,"—which shows that not only was this Amīr a Mamlūk, or retainer of the Sultan En-Nāsir, but that he held the office of cup-bearer, which was among the most influential and coveted posts in the court. The carving of the arabesques on the geometrical panels of El-Māridāny's pulpit is more delicate and intricate than that of Lāgin's, and inlaid borders (consisting in a double ivory line, separated by others ornamented with a scroll pattern) are enclosed in a series of thin wooden beadings. Like Lāgin's carvings, those of El-Māridāny are executed in two reliefs; the principal lines of the design being more prominent than the

scroll-work of the background, which, however, is still in sufficient relief.

Nearly contemporary with the pulpit of El-Māridāny are the panels, figs. 41 and 42, which are taken from one of M. de St. Maurice's doors in the South Kensington Museum. In the case of a modern application of the original panels it is not always safe to assume that all the pieces belong to the same pulpit; and especially doubtful is the connection between the geometrical panels and the horizontal inscriptional friezes above and below, which are more likely to be selected because they fit the present scale of the door, than because they belonged to the same pulpit as the geometrical panels they accompany. In the present instance the horizontal panels give the name of the Sultan Zeyn-ed-dīn Hasan—

النصر الدائم والجاه القائم لمولانا السلطان
الملك العادل الناصر المظفر زين الدين حسن

the peculiarity of which lies in the substitution of the surname *Zeyn-ed-dīn* for the *Nāsir-ed-dīn*, which is invariably applied to Hasan on his coins and public buildings. The inscription, however, is no forgery, and there is no other Sultan Hasan to whom it could apply. The only question is whether it belongs to the geometrical panels in whose company it is found. If it does not, which I am far from asserting, at least the geometrical panels belong to a period very nearly coinciding with the reign of Sultan Hasan (1347—1361). Mr. Wild has preserved a sketch of the pulpit of the mosque of Kūsūn, now destroyed, which contained panels of the same curious octagonal shape, with very obtuse angles, like those in fig. 42.* The Amir Kūsūn was one of the Mamlūks of En-Nāsir, Hasan's father, and his mosque was built in 1329. It does not necessarily follow that the pulpit was set up at

* The same shape is seen in the plaques of the bronze door of the mosque of Talāi' ibn Ruzayk, as restored by Bektemir in the 14th century: see *Prisse*, ii., pl. 95. Some portions of the original mosque of Talāi' are still standing.



FIG. 42.—CARVED PANELS FROM PULPIT (OF KUSUN?).
Fourteenth Century. (South Kensington Museum.)



once; a temporary pulpit may have served at first. But the similarity of the panels (fig. 42) to those sketched by Mr. Wild seems to indicate that if the St. Maurice door is not actually made up from the fragments of the vanished *mimbar* of Kūsūn, the pulpit that was thus desecrated undoubtedly belonged to a period nearly coinciding with the death of that Amir in 1341. If the panels with Sultan Hasan's name on them belong to the rest, the pulpit must have been built after his accession in 1347, in which case it may have been placed in Kūsūn's mosque by Sultan Hasan, in accordance with a not uncommon practice. The work is very like El-Māridāny's, but even more delicate, and there cannot be a long interval between them. It should be stated that the outer beading enclosing both these and the Lāḡin panels is absolutely modern. It is reproduced in the engraving only to show the position of the panels towards one another. The original panels are inlaid with a line of ivory inside which is a border of dots.

After the time of El-Māridāny's carvings, the style of work seems to have gradually deteriorated. Sheykhū's pulpit, in his mosque built in 1358, is good, but ordinary; El-Muayyad's, in 1420, shows a decided falling off in the execution. With the pulpit of Kāit Bey, fig. 34, we come to the end of the history of this description of wood-carving in Cairo, so far at least as dated specimens are within our reach. The art may have continued for some generations longer, but it had already lost much of its character and beauty. In form and arrangement, and also in general effect, the pulpit of Kāit Bey may challenge comparison with almost any other; but when we come to look closely into the work it becomes apparent that the art of the carver had undergone a serious process of deterioration. The designs are mechanical, hard, and prone to repetition: they will not bear comparison with the panels of Lāḡin or El-Māridāny. This is no doubt partly due to the substance used. The wooden panels are merely shells to contain smaller ivory panels of the

same outline, and the latter alone are carved. Ivory is less easily worked than wood, though capable of even more delicate treatment; but the artists who were accustomed to work in wood must have found the ivory difficult to handle in the same flowing lines. Ivory carving of this type is usually somewhat hard in treatment, as may be seen in the beautiful but somewhat stiff panels of a mosque door engraved in fig. 69. These, however, belong to a much better period than those of the Kāit Bey pulpit, as may be seen at a glance; and it is indisputable that in the time of Kāit Bey the carving had changed character for the worse. This is the more remarkable, since the reign of this Sultan was famous for the multitude of admirable architectural works promoted by himself. The stone carving of the time is perhaps unequalled in any other period of Cairene art. Perhaps the whole energy of the carvers was absorbed in stone work, and the softer material was neglected. After the dominion of the Mamlūks was transferred to the Pashas appointed from Constantinople, the art of carving pulpit panels seems to have died out. The ordinary Turkish mosque of Cairo has a painted *mimbar*, of the same shape as its carved predecessor, but with red-ochre and green painting, of no special character, in place of the intricate geometrical panelling of the best period.

The *kursy*, or lectern, a V shaped desk, on which the Korān was placed for reading, was sometimes constructed, like the pulpit, of geometrically arranged carved and inlaid panels. An example may be seen engraved in Prisse, Pl. 18, where the fine carved *kursy* with open work at the top belonged to the mosque of Barkūk in the eastern cemetery. Carved panelling of the same style is also sometimes employed for the wooden casing of the tombs which occupy the founder's chapel in a mosque. The ordinary Muslim tomb is simply an oblong erection of stone, with a short pillar at each end, one of which has the representation of a turban carved upon it. Even the graves of the greatest of Mamlūk Sultans were constructed



FIG. 43.—CARVED PANELS OF THE TOMB OF ES-SALIH AYYUB.
Thirteenth Century.



after this simple model. Such is the tomb of Kalaūn, the plainness of which is partly concealed by the clumsy lattice screen of heavy baluster-work which encloses the grave and the relics of the Sultan. The tombs of Sultan Hasan, Barkūk, and indeed of most of the sovereigns of Egypt, are of this unpretending character. So long as there was room inside for the occupant to sit up and say his Catechism to the examining angels, Munkar and Nekir, the outside of the grave was of small consequence. The real tomb of the Sultan was the mosque, with its glorious dome, which rose above the humble stone grave. But in some instances the grave itself was a subject for artistic treatment. The tomb of Es-Sālih Ayyūb, built in 1249, is the earliest example of the carved panel-work with which we are acquainted.* It is fifty years earlier than Lāgin's panels, described above; and evidence of priority, apart from the known date of erection, is presented in the simplicity of the arabesque designs, as seen in the cut (fig. 43), which is taken from a paper squeeze made under my eye in 1883. Another mode of ornamenting a tomb, which appears to have been usual at an earlier date still, was by a frieze of wooden planks surrounding the oblong grave at its upper edge. This is the method employed for the tombs of the members of the 'Abbāsy family, buried in the chapel behind the mosque of Sitta Nefisa. Each grave consists externally of a square stone box, standing about four feet from the ground, and ornamented only by a band of wood, carved with inscriptions, about six inches in width, running round the four sides at their upper edge. The dates of these tombs range from A.H. 640 (A.D. 1242) to A.H. 768 (A.D. 1366).† The ornament here is simply inscriptional. But there is at least

* A very similar style of work is seen in the carved wooden niche from the mausoleum of Sitta Rukeyya, which may belong to a time very nearly contemporary with Es-Sālih Ayyūb. This niche is now in the Arab Museum at Cairo, and a photograph of it may be seen in the portfolio of objects in the *Musée Arabe*, of which a copy is in the Art Library at South Kensington.

† E. T. Rogers Bey: *Rapport sur le lieu de sépulture des Khalfes Abbassides*, &c. (Com. Conserv. Mon. de l'Art Ambe).

one instance of a more elaborate decoration of a frieze of this kind. The grave of a sheykh, in one of the cemeteries which surround Cairo, was formerly ornamented by a wooden frieze, carved not only with inscriptions but with exceedingly soft and delicate arabesques. One of the sides is represented in fig. 44. It is made of some soft yet close-textured wood, which has evidently offered little resistance to the friction of the desert sand, the effects of which are seen in the singularly soft appearance of the surface, which looks as though it had been intentionally rubbed with emery paper. Each side of the frieze is made of four long parallel strips, with intervening panels of various lengths; and the tenons by which it was mortised to the next side are seen in the cut. The back of the frieze is carved with a large bold arabesque design which belongs in style to the period of Ibn-Tûlûn, or a little later. A Kûfy inscription over the door of the mausoleum indicates an earlier interment of the year 304 (A.D. 916), and it is safe to assume that the original carving belonged to this earlier grave. Thus the frieze was carved on materials that had been seasoned for perhaps three centuries, and this will explain the somewhat large surfaces having escaped the effects of the sun. The carving is unusually fine: a border of Korânic inscription at the top is supported by an exquisite arabesque scroll-border, and the main band of the frieze is ornamented with panels of arabesques surrounded by inscriptions in high relief, on a ground of arabesque scrolls. The inscriptions here are partly from the Korân, partly benedictory to the deceased, whose name they give, together with the date of his death, which is legible in the right-hand bottom corner of the engraving, A.H. 613 (A.D. 1216).

Thus far we have seen no Cairo carving that traverses the law of the Mohammadan religion against the reproduction in art of the forms of animate creatures: arabesques, and scrolls of endless variety, have been the staple of the ornament. These are the characteristic features of Cairo carving. But it would be a mistake to imagine that the prohibition against the representation of



FIG. 44.—CARVED PANEL OF A SHEYKH'S TOMB. 1st th.
A.D. 1216. (South Kensington Museum.)

Face p. 107.

living things was universally observed. We shall see when we come to discuss the early metal-work of Egypt, and also the textile fabrics, that figures are at certain periods the rule, not the exception. So in wood-carving, though not to the same extent, if one may judge from existing examples, the law about figures was not always observed. Panels carved with representations of



FIG. 45.—PANEL OF A DOOR FROM DAMIETTA.

(Cairo Museum.)

birds exist in the South Kensington Museum and in the Arab Museum at Cairo. But the most remarkable example of figure carving in Cairo is found in the doors of the Māristān, or mosque-hospital of the Mamlūk Sultan Kalaūn, the father of En-Nāsir Mohammad. M. Prisse d'Avennes fortunately studied these extraordinary panels when they were better preserved than they are now, and from the squeezes he then took he was able to

restore the designs to the almost too perfect outlines presented in his plates (nos. 83 and 84), from which the engravings, figs. 46-8, are taken. There are eight panels altogether, of pine wood, and each is carved with representations of the sports, amusements, and occupations of the Arab, or rather of the Persian, for there can be no doubt that the source of these admirable designs was the art of Mesopotamia, where the traditions of ancient Persian and Assyrian art still survived in the metal-work of the artists of Mōsil and other towns.

In the centre of the first panel we see on a ground of rather crude scroll-work a centaur, winged like an Assyrian beast, and wearing a crown exactly resembling the tiara that is found on similar centaur huntsmen on the figured metal-work of Mōsil. He has stretched a bow and is discharging an arrow at a unicorn behind him; a corresponding unicorn paws the ground on the opposite side. The scene is just what we find through the whole range of Mesopotamian design, from the oldest Assyrian bas-reliefs downwards.

In the second panel a peacock stands in the middle, in a geometrical figure formed of a lozenge and quatrefoil combined. Large leaf scrolls winding round form a sort of division in the band of figures, and the sections thus marked off are filled with (on the left) two running servants, holding ewers and glasses, and (on the right) a player on the square lute and a seated figure with drinking-vessels. Simple scroll borders enclose the central band, above and below.

In the vertical panel, which is divided into various compartments by the curling lines of the scroll-work which forms the background, is a kneeling figure in the act of rising, with a slain deer flung over his shoulders and held in position by one arm thrown round its neck and the other round its hind-legs. Over this figure two eagles are perched, breast to breast, but with beaks averted; and on either side of these, in exaggerated proportions, are two long-tailed cockatoos, fronting inwards, but with heads



FIGS. 46 AND 47.—CARVED PANELS FROM THE MARISTAN OF KALAUN.
(After Frisoe d'Avennes.) Late Thirteenth Century.

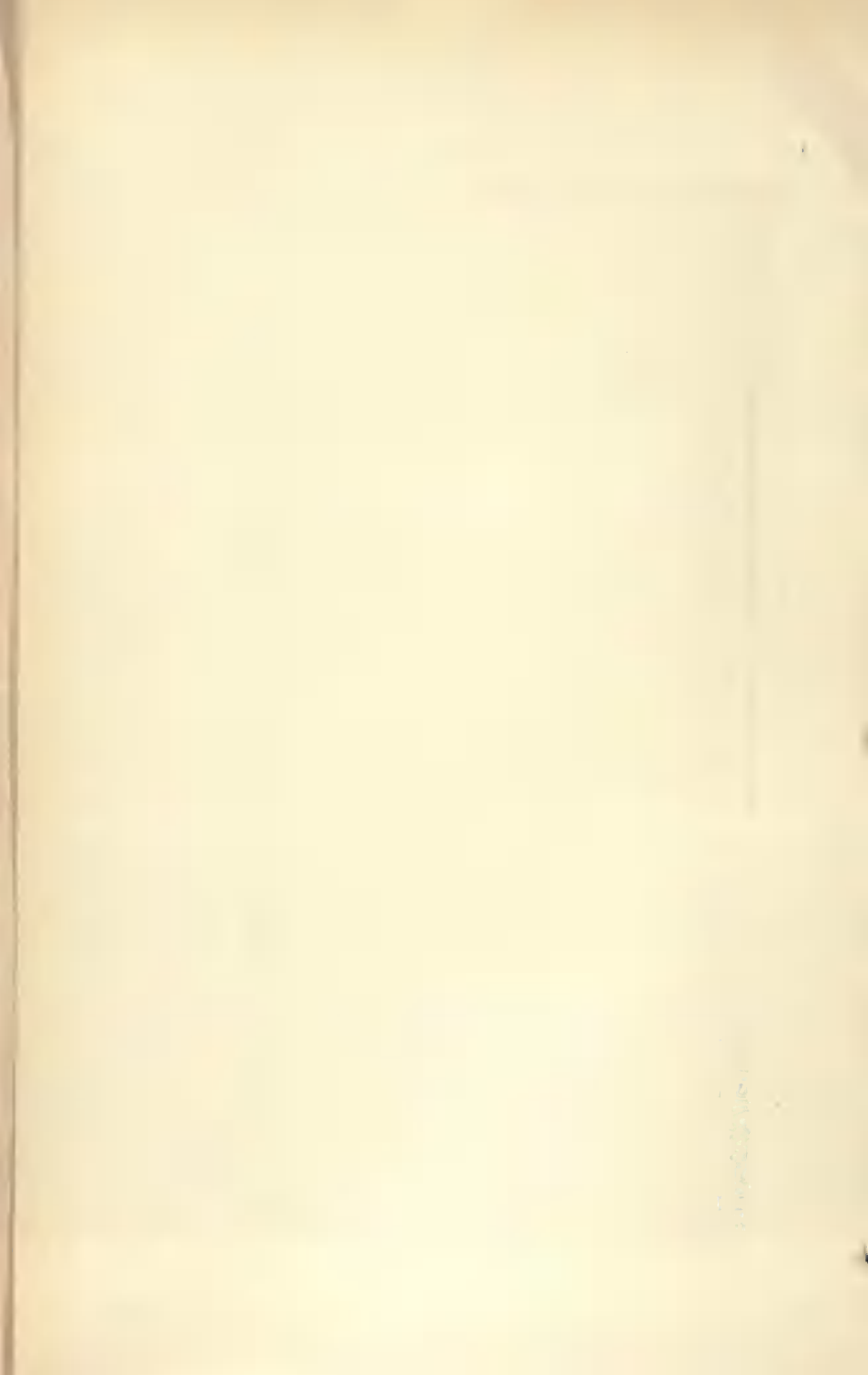




FIG. 48.—CARVED PANEL FROM THE MARISTAN OF KALAUN.

averted like the eagles ; over the cockatoos are a corresponding pair of deer, each with an eagle on his back, with wings spread, having just alighted on his prey ; and, to crown the panel, is a central representation of two combatant ducks,—their webbed feet clearly visible—beak to beak. These upper designs are



FIG. 49.—LATTICE-WORK.
(*South Kensington Museum.*)

matched, below the cockatoos, by similarly arranged figures : to balance the eagles and deer, a pair of winged Assyrian monsters or centaurs, resembling that on the first panel described above, with the same three-pointed crown ; and underneath these, in the

centre, to correspond with the ducks, a pair of long-eared rabbits confronted. These figures are depicted in a spirited style that has no parallel in Eastern carving, at least in Egypt or Syria; and they mark a distinct epoch in the history of Cairo art.

As has been already said, there is but one source to which these remarkable carvings can be traced. The artists who engraved the hunting-scenes, the water-fowl, the drinking-bouts, of the bowls and other vessels of bronze and brass made at Mōsil or in the neighbouring cities—the artists, in short, who had inherited the traditions of animal design from the workmen of the Sassanians, the Parthians, and the Assyrians, these were the men who inspired, if they did not actually execute the carved panels of Kalaūn. The birds face to face refer no doubt to the cock-fights which the Persians included among their favourite sports, and the adoption of the duck instead of the cock has its explanation in the name of the Sultan for whose hospital these panels were carved; for Kalaūn was a slave from Kipchak, and his name means "duck" in his native Tartar tongue. It is strange that so admirable a style of decoration did not find wider acceptance among the founders and architects of mosques in Cairo. No near parallel to these carvings of Kalaūn can be found in any mosque of the period, still less in any of later date. A few pieces carved with parrots and peacocks have been noticed, but these, since they are separated from their original surroundings, may have come from the same source as the panels still remaining at the Māristān of Kalaūn.

It is perhaps rash to speculate upon the causes which led to the sudden adoption and as sudden abandonment of a remarkable and characteristic style of carving; but in the present case there is some evidence that may help us to an explanation. In the chapter on metal-work we shall have to describe a similar sequence of adoption and abandonment with respect to the figured style of Mōsil, which closely resembles the style of Kalaūn's carvings. The chased bowls and caskets, covered with representations of

hunting and drinking scenes, beasts of the chase, and the like, made their appearance in Cairo about the end of the first quarter of the thirteenth century, so far as existing specimens allow us to judge. The style was brought from Mesopotamia by the princes of the family of Ayyūb, of which Saladin was the most celebrated member. The Ayyūbis passed through the country watered by the Tigris and Euphrates before they arrived in Syria, or attempted to worm themselves into the sovereignty of Egypt. Saladin and his kinsmen were the officers of the great Sultan

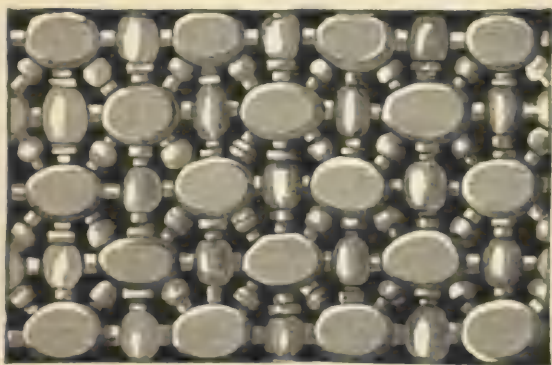


FIG. 50.—LATTICE-WORK.
(*South Kensington Museum.*)

Nūr-ed-din, of Aleppo and Damascus, who came of the stock of the Beny Zenky of Mōsil. The Beny Zenky had been among the earliest to adopt the novelty of a figured coinage: they adorned their money with the saints and holy personages of the Byzantine coinage, or with symbols taken from Persian astrology, in place of the sternly simple inscriptions which covered the faces of the coins of the orthodox Khalifate. These innovations were carried into Syria by Nūr-ed-din, who entertained as few prejudices on the subject of representations of living things as the rest of the Kurdish and Tartar princes, who now ruled the best provinces

of the Khalifs of Baghdād. Saladin (though a very pious and orthodox prince) brought the heretical novelty to Cairo, where he carved his own cognizance, an eagle,* on the wall of the Citadel which he built on a spur of Mount Mukattam. There is a brass and silver casket of Saladin's grandnephew in the South Kensington Museum, covered with figures of huntsmen, &c., which shows that the Ayyūby kings of Egypt continued to patronize the art introduced by their great kinsman. So, too, the earlier Mamlūks found no spiritual injury to result from the representation of men and animals on their cups and perfume-burners, their trays and bowls. Evidence of this will be found in the chapter on metal-work; and the lion, the cognizance of Beybars, the most powerful of the early Mamlūk Sultans, occurring on coins, doors, and walls, shows that this indifference to a minor regulation of the Arabian prophet extended to more forms of art than one. Beybars' lions or chitahs on his coins and bronze mosque doors, Beysary's eagles on his perfume-burner, El-Ādil's hunting-scenes on his coffret, Kalaūn's centaurs and drinking-bouts on his hospital doors, all point to a general acquiescence for awhile in this flagrant disregard of what had always been held a binding precept in Islām. But with the reign of En-Nāsir, Kalaūn's son, a new style of metal-work came into fashion: rosettes of flowers and leaves, arabesques, and scrolls, and the rest of the legitimate materials of the Mohammadan artist, obtained a hold on Cairo work in all branches that was never again lost. At precisely the same time, the figured carving, which seemed to promise so fine a field for mosque and palace decoration, was abandoned in favour of the small carved and inlaid arabesque panels, which have already been examined in detail. It is not unreasonable to ascribe the change in the wood-work to the same cause as that which operated in the metal-work; and this seems to have been natural enough. The barbarous Kurds

* It may, however, be the crest of Karākūsh, the eunuch, who was commissioned by Saladin to build the Citadel. Karākūsh means "black bird of prey."

and Tartars, who had swarmed over the lands of the Khalifate, and entered Egypt, might for a while, by dint of sheer imperious insistence, make a form of art popular which was nevertheless unorthodox ; but as the barbarians settled down in the cities of the Muslims, which they did so much to beautify, they must have gradually become assimilated to the people they governed, and their first ignorant indifference about so vital a part of religion as the prohibition of images of animate things must have given place to a proper iconoclastic feeling, or at least they must have



FIG. 51.—LATTICE WORK.
(*South Kensington Museum.*)

learned to weigh more accurately the sentiments of the pious on the subject. Thus the imported art of figure carving, which was the temporary *protégé* of the Tartar princes, before they knew better, gave place to the arabesque and geometrical ornament which had long before been settled upon as most consonant with the letter and spirit of Mohammad's precept. The figure art was foreign to Cairo ; it was heretical ; and it was little suited to the small panelling which was a condition of the carver's art in so hot a climate : the large panels of Kalaün's doors have suffered severely from the heat, and the size is against all the precautions of joinery in hot climates. On the other hand, carved panelling, in small

sizes, worked into intricate geometrical patterns, formed the native art of Cairo, was exactly adapted to the conditions of climate, and offended no law of God or man. It was clear that the figure carving had no chance against so well accredited a rival.

When we say that the small arabesque carving described in detail, and illustrated by specimens from numerous pulpits, ~~was~~ a native Egyptian art, we may be thought to be going too fast. The evidence is certainly incomplete for so definite an assertion, it will be said ; and until we know something more about early Egyptian

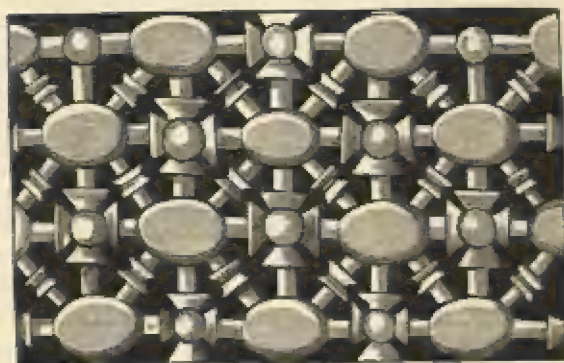


FIG. 52.—LATTICE-WORK.
(South Kensington Museum.)

carving, say in Fātimy times, it is hardly reasonable to expect a cautious student to assent to any proposition about "native" arts in Egypt. But I believe that the evidence for the indigenous nature of the particular style of carving referred to is strong enough to warrant the appellation of native art. It is to be noted that in no other Mohammadan country do we find the same character of wood carving except in isolated examples, which may be due to Cairene influences. Damascus carving is absolutely different in style ; it consists in rich flowery decorations in high relief, and not of arabesques in small geometrical panels and comparatively low

relief. Persia has nothing of the kind, nor, so far as we know, has the opposite region of Mauritania. The carved panelling of Cairo seems to be peculiar to Egypt. This is in itself a strong argument for an Egyptian origin of the art. But there is other evidence, which, if at present not so complete as could be desired, still offers a considerable presumption as to the history of the art. The finest specimens of carved geometrical panelling are found, not in the Mohammedan mosques, but in the Christian churches of the Copts, in Babylon, near Old Cairo. The screens of these Coptic churches are often one broad expanse of elaborate inlay and carving in

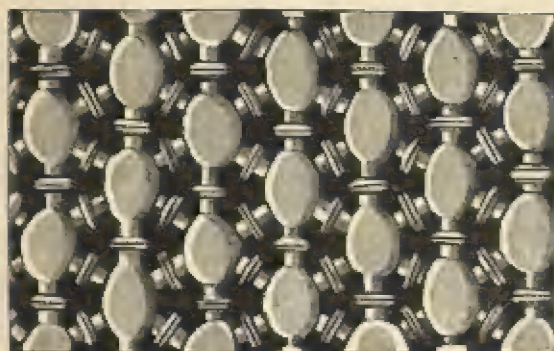


FIG. 53.—LATTICE-WORK.
(South Kensington Museum.)

wood and ivory, arranged like the mosque pulpits in geometrical panels of small size. The designs are naturally founded more or less upon the cross, which is also inlaid very frequently in the screens; but the character of the work is very similar to that of mosque pulpits, and in some instances, the designs of the carving are as nearly identical as the originality of the Cairo artist would permit any two designs to be. A glance at the lectern engraved in Mr. A. J. Butler's admirable work on the Coptic churches of Egypt,*

* *The Ancient Coptic Churches of Egypt*, ii. 66, 67.

will show the identity of the two, and there is every probability that the workmen who made the Coptic screens and lecterns made also the Muslim pulpits. It is historically ascertained that the Copts were the most skilful of the artists of Egypt, and were employed by the Mohammadans to execute some of their mosques; and when the excellence of the carvings in the Coptic churches is considered, it is not unnatural to assume that this was among the arts which the Copts lent to their Muslim masters. The question of date is not so easily settled. It is of course necessary to the absolute establishing of this view of the origin of Cairo

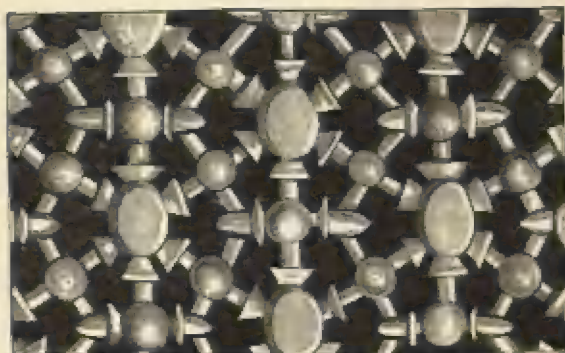


FIG. 54.—LATTICE-WORK.
(South Kensington Museum.)

panel-carving that examples of Coptic carving should be found earlier than any in the mosques, but in this respect the evidence is not convincing. Mr. Butler states, for example, that the screen of the convent of Abu-s-Seyfeyn, near Cairo, dates from A.D. 927, and the priest of the convent said that it was nine hundred years old. But Coptic priests are bad authorities on such a point, and the comparison of style which Mr. Butler institutes with the restoration pulpit of the mosque of Ibn-Tūlūn tends to give a thirteenth instead of a tenth century date. But there are various structural arguments which, in the opinion of

Mr. Butler, who speaks with the highest authority on Coptic art, prove that some of these carvings go back as far as the tenth century at least, while the doors at El-Adra, in the Nitrian valley, are stated to be certainly of the eighth century; and if this be accepted, there can be no further question as to the origin of the art of panel-carving and inlaying in Cairo. The Coptic churches are mostly earlier than the tenth century, and must have had screens from their foundation; and there is no reason to suppose that the screens have been often renewed, or that it was impossible to carve as well in the tenth century as in the thirteenth; indeed

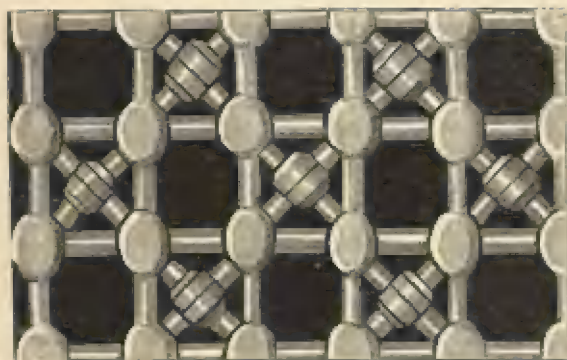


FIG. 55.—LATTICE-WORK.
(*South Kensington Museum.*)

the fine stucco designs of Ibn-Tūlūn, which was built by a Coptic architect in the ninth century, point to a skill in working plaster ornament even then. It was, moreover, natural that the Copts, the old inhabitants of Egypt, should have early discovered the method of defeating the warping tendencies of their hot climate by means of a minute subdivision into panels. Taking these various considerations, it is not so rash as it seemed to assume that the art of carving panels in the style characteristic of Coptic screens and Muslim pulpits was native to Egypt, and was the special property of the Copts.

The Coptic churches also contain some examples of figure carving, somewhat resembling the hunting figures of Mōsil metal-work. A noble triforium screen in the church of St. Barbara, and another in the church of St. Sergius (Abu-Sargah), in Old Cairo, are decorated with warrior saints and beasts much after the model of the horsemen of Mesopotamian art. There may of course be a connection between these and Kalaūn's panels, described above, but it is not necessary to trace the two to the same source. There can be no doubt of the Mesopotamian origin of Kalaūn's carvings; but those of St. Sergius may not improbably be directly derived

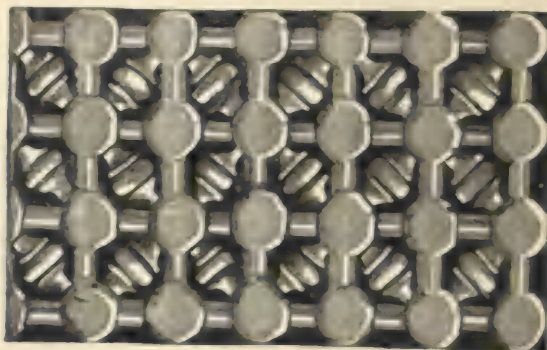


FIG. 56. LATTICE-WORK.
(*South Kensington Museum.*)

from Byzantine models, with which they show more affinity than with the Mōsil style. Had these carvings been derived from the Mesopotamian school, we should expect to find a prevailing hunting character, interspersed with scenes of festivity, wine-cups, and musical instruments; instead of which the subjects are principally warrior saints of the Byzantine style, and the beasts that accompany them may be due as much to the animal decoration of the Lower Empire as to the hunting-scenes of Persian art. The St. Barbara carvings, however, closely resemble Mōsil work, and have even the winged centaur. It is, after all, merely a question of the immediate

source of the Coptic figure carvings, for it can hardly be doubted that the Byzantine figures and beasts were the offspring of the Sassanian and Assyrian style, as much as the figured metal-work of Mōsil and Cairo and the carvings of Kalaūn. There is always much that is hypothetical in the attempt to trace the origin of any special art; many influences combine to form a style, and it is contrary to experience to ascribe the whole of the elements that go to make up a style to one source. But whatever may be the subsidiary influences in Cairo carving, we cannot be wrong in ascribing the development of arabesque panel-carving to Coptic workmen, and the employment of figures to the influence of Mesopotamian models, either directly, or through the medium of Byzantine examples.

The wood-work in the mosques of Cairo is principally of the carved and panelled style; pulpits, lecterns, doors, are subjects for panel-work, inlaid and carved, in geometrical patterns; inscriptional friezes, when of wood, are carved and generally painted or gilt; and the casings of the tombs, when there are any, are panelled like the pulpits. But there is another manner of treating wood which is commonly adopted in mosques: this is the open lattice-work which, from its most familiar application, in the projecting windows of houses, is commonly known to us as *meshrebiya* work. The earlier mosques show as a style of lattice which is much less graceful than what is usually understood by *meshrebiya* work. This oldest lattice consists in a frame of stout quarterings, divided into compartments of a couple of feet square, each of which is filled with a number of upright balusters, square in parts and round in others. The effect of such a screen, as seen in the enclosure of the tomb of Kalaūn, is clumsy and heavy. A more usual kind of lattice is the wide open grille, resembling the cross-bars of a prison window, and having no pretensions to elaboration. The ordinary graceful lattice-work of the *meshrebiyas* is not common in mosques, though occasionally the sanctuary is screened off by such a lattice, and in one of the

Coptic churches a screen of this kind forms a cheap but graceful substitute for the more elaborate wood and ivory carving.

It is in the houses of Cairo that this lattice-work is seen in its greatest profusion and variety. Fig. 12 gives several excellent examples in a single street. The number of such streets is daily diminishing, partly in consequence of the dread of fire, which used to leap from window to window in the old city with frightful



FIG. 50A.—LATTICE WORK.
(*South Kensington Museum.*)

rapidity, and partly because the modern Cairenes are enamoured of the unsightly architecture and plate-glass of Europe (which is unhappily seen introduced in the foremost window in fig. 12). The South Kensington Museum is peculiarly rich in examples of fine lattice-work. The two best are from a single house in Cairo, which was in course of destruction, after being condemned by the Ministry of Works as unsafe, when I was in Cairo, in 1883; and I was thus enabled to purchase for the Museum

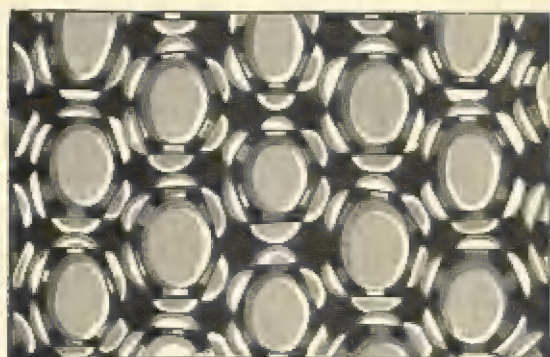


FIG. 57. — LATTICE-WORK.
 (South Kensington Museum.)

the complete room (no. 1193), and the meshrebiya (no. 1194), without violating any standing monument of Cairo art. The lattices of these two windows are of a fine period, probably the early part of the eighteenth century, and the small compartments of the larger one are filled with turned lattice of a singularly delicate character, which gives the effect almost of lace when viewed from inside with the light shining through. One of these panels is represented in fig. 49. There are now more than forty different specimens of lattice-work in the South Kensington Museum, and most of them present some variety in the design. It would not seem that there was much opportunity for variety of effect in the mere combination of short turned bobbins of wood in a lattice screen; but the Cairo workmen found out an infinity of changes that could be rung on their simple materials. The engravings, figs. 49-58, which represent ten different styles in the South Kensington Museum, will show how variously the component parts of a lattice may be arranged. The essential feature of the work is a series of oval turned balls connected together by short turned links, which fit into holes in the balls. It is in the arrangement and number of these links, of which 2000 are often contained in the space of a square yard, that the variety of design is effected. Sometimes the balls are supported by four links or arms forming a cross, sometimes by six or eight, like a star; and the distance between the balls may be extended, so as to permit of a smaller nob at the crossing of the arms, a modification that produces a singularly delicate and lace-like effect. Sometimes these intermediate balls are so distributed as to form a pattern upon the ground of the wider design, as in fig. 58, where the finer interlacing forms the outline of a lamp suspended in the more open lattice. The lamp is the most usual design in such interlaced meshrebiyas, but Solomon's seal and other simple designs are also found, and sometimes an Arabic inscription is formed by the skilful arrangement of the lattice. An example of interlacing cypresses may be seen in the South Kensington

Museum, (no. 1471—1871,) and of a Coptic cross formed by the lattice-work (1492—1871). The meshrebiya no. 140 (1881), has an interlacing inscription

نصر من الله وفتح قريب وبشر المؤمنين يا محمد

"Help is from God, and approaching victory, and give glad

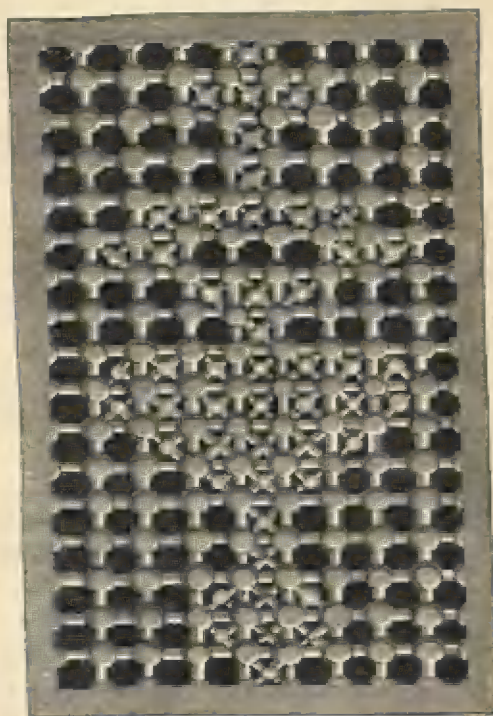


FIG. 2.—LATTICE-WORK.

(South Kensington Museum.)

tidings to the Faithful, O Mohammad!" The meshrebiya from the St. Maurice collection, (no. 892—1884,) shows several examples of interlacing designs, Solomon's seals, hanging lamps, and the Kūfy inscription (رأس الحكم مخافة الله) داخل الحكم صداه الله

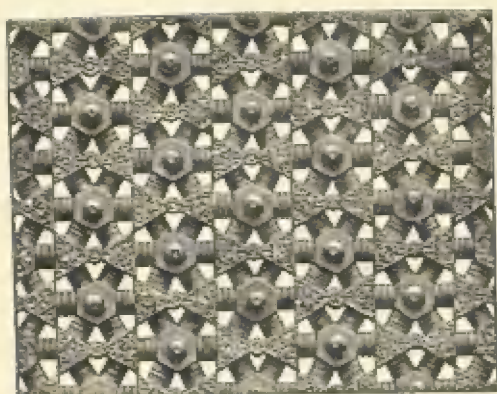


FIG. 59.—FRONT.

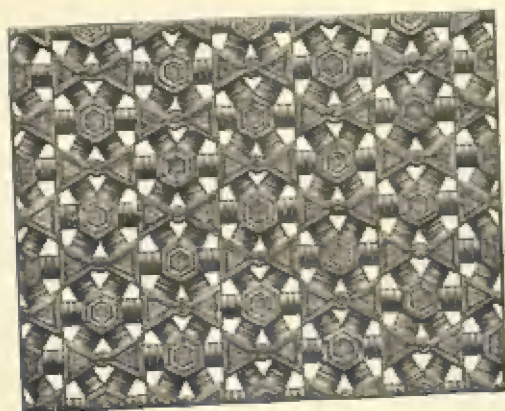


FIG. 60.—BACK.

CARVED AND INLAID LATTICE-WORK.



"The chief of wisdom is in the fear of God." Another piece of lattice-work, of a finer and more elaborate character than is commonly seen, has the inscription in fine Kūfy letters, **الله و ملائكة صلى على النبي** "God and his angels bless the Prophet," formed by pieces of thicker wood, inlaid with ivory lines.

This more elaborate style of *meshrebīya* work deserves special mention. It is more particularly used for the open panels of the balustrade of pulpits, of which narrow examples are seen in fig. 34, but it is also found in the upper panels of the partition screens of mosque sanctuaries, and in other positions. The principle of construction is the same as in ordinary lattice-work, but the component parts are carved, and sometimes inlaid with ivory. A fine example in the St. Maurice collection is engraved in figs. 59 and 60, in which the front and back are quite different in treatment and effect. The lattice, instead of comprising oval balls and round links, is composed of hexagons joined by triangles and turned links, and the hexagons and triangles are carved and inlaid. On one side the triangles are inlaid with carved ebony triangles pointing the opposite way to the triangles in which they are set, and the hexagons are studded with dark wooden bosses. On the other side the triangles are carved with trefoils, and the hexagons with sixfoils, each set in ebony and ivory borders. Work of this description is uncommon.

Turned lattice-work may unquestionably be included among the native arts of Cairo, though it was also made elsewhere. According to M. Prisse, this craft is not practised now in Cairo, and the modern specimens come from Arabia, notably Jedda. It is unfortunately true that very little of this work is now done in Cairo, but it is not wholly extinct, and in the earlier half of the century it was still a considerable industry, though Lane records that the work was then inferior to the old style. The Egyptian turner sits cross-legged to his work, and uses a primitive lathe, which he causes to revolve with a bow, employing his toes as well as his fingers.

Lattice *meshrebiyas* form the principal wood-work in a Cairo house ; but there are other uses of wood to be described. The delicate carved and inlaid panelling which is usual in mosque pulpits is seldom employed in houses, though probably the old palaces of the Mamlûks, had they been preserved, would have displayed examples of such work as rich and elaborate as any in the mosques. The panelling generally seen in the doors of the



FIG. 62.—PANELLED DOOR FROM A LOFT'S HOUSE.

(*South Kensington Museum.*)

wall-cupboards (which surmount the divan in Cairo rooms, and consist of a central cupboard with double door, surrounded by little arched recesses for pottery and other ornaments), and also used in the interior doors of rooms, is of a simple kind, intended more to guard against the warping effects of the heat than to serve as an ornament to the room. Nevertheless, the effect is sometimes very pleasing, as in some of the doors engraved in figs. 61-4, where the



FIG. 62.

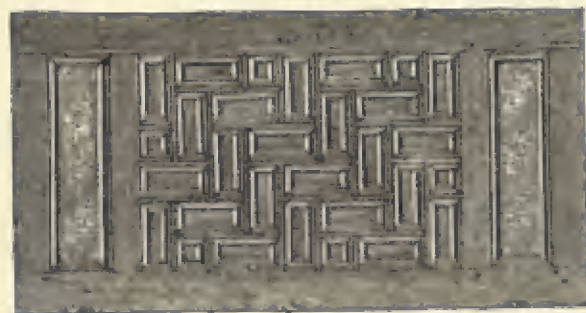


FIG. 63.
PANELLED DOORS,
(South Kensington Museum.)



FIG. 64.

panels are ingeniously arranged in a sort of L pattern, reminding one of some of the designs of Saracenic metal-work, or in chevrons, or in a hexagonal figure with a central star, or, finally, with a Coptic cross (fig. 64), which indicates that the door in question belonged to a Christian house.

This simple panelling of the door and wall-cupboard, and the fine lattice-work of the *meshrebiya*, constitute the most conspicuous ornaments in wood of the ordinary Cairo room ; but there is yet another manner of treating wood, which holds an important place in the better chambers, and also in the mosques. This is seen in the ceilings, which are often the most beautiful part of a room, and are elaborately decorated in both mosques and houses. The coffered ceiling of the finest class consists of, first, the beams of the roof, which are suffered to appear in their natural position, with that true appreciation of the principles of good decoration, in which structural features are turned to account, instead of being hidden, which characterized the Cairo architect. The beams are of rough pine trunks, of considerable thickness, and are either left in their natural round or half-round shape, or more generally are covered with thin boards, which are frequently made in a square form. The latter is the common plan in the mosques, but in houses the round outline of the beams is often preserved to within a couple of feet of the end, when stalactites mask the transition to the square. The beams, whether round or square, are covered with a coating of canvas saturated with plaster, like the Italian *gesso*, and decorated in colours, generally red and blue, with gold and white to give light ; and the deep hollows between the beams are divided into small coffers and similarly coated and painted, or the bare planks are similarly painted, with arabesques and other designs of great beauty. All this work, Mr. Wild informs me, is done on the ground, and only put up in its place when finished.

The whole effect of this kind of ceiling,—with its contrasts between the heavy beams and the delicate patterns between them,

and the gleam of gold in relief against the deep-toned blue and red decoration,—is exceedingly rich.

Another mode of decorating a ceiling is by nailing thin strips of wood on the planks that constitute the roof, in a geometrical



FIG. 65.—CEILING OF APPLIQUÉ WORK.
(*South Kensington Museum.*)

design, and covering the whole with a thin surface of plaster, on which various arabesque and floral ornaments are then squeezed while the material is soft, and the whole is then painted and gilt.



FIG. 66.—TABLE (KURSY).
(Cairo Museum.)

The cut, fig. 67, represents a ceiling in the St. Maurice collection, acquired by the South Kensington Museum. The design is raised by means of strips of wood about half an inch thick, and these strips are gilt, with lines of red to shade the gold; the intervening arabesques are in plaster, gilt, with edges of red and blue. The general effect is very handsome. Sometimes the ceilings are made in this *appliqué* style with no decoration in the interstices. Such is the example (fig. 65), which comes from a comparatively modern and poor class of room. The strips of wood are nailed on the planks in a geometrical pattern, with a few bosses to form centres, and the whole is tinted with red ochre. This and the preceding ceiling (fig. 67) belonged to meshrebiyas, and the style was only employed for ceilings of small size, where no heavy beams were required, such as those over meshrebiyas and over the durkā'as of small rooms. It should be noticed that a somewhat similar style of *appliqué* work is used for the bases, as well as for the ceilings, of meshrebiyas. In the illustration (fig. 12), the corbelling of the nearest meshrebiya is covered with rosettes and stalactites, all of which are first cut out with a chisel and fret-saw, and then nailed on to the window. Fret-work is also used for the pendentive eave which surmounts all good meshrebiyas.

The furniture of a Mohammadan house is so limited, that it is not difficult to sum up the chief wooden objects. An ordinary room in Cairo contains,—beside such structural wood-work as the lattice-window and the panelled wall-cupboard, and the simple shelf that runs round above the latter, supported by common gallows-brackets,—nothing but divans, supported on a frame, which is not ornamented, and perhaps a little table (*kursy*), and a desk for the Korān. The *kursy* (which must not be confounded with the lectern of mosques, also called *Kursy*) is generally of inlaid ivory or mother-of-pearl, but some are of turned wood, as in the engraving fig. 66, which is from a table preserved in the Cairo Museum. Portions of the stalactites are broken off, but the design is sufficiently preserved for us to judge of the effect, which is heavy, and

inferior to the mother-of-pearl tables with which we are more familiar. The reading-desk is of the crossed-leg or camp-stool order, and is generally inlaid with mother-of-pearl, which covers the greater part of the surface of the table, and is fixed with glue. The ordinary Cairo patterns are very simple, and consist in stars and geometrical designs; but the Syrian tables, of the same shape and material, are carved with figures on the mother-of-pearl, and touched with red and green paint. In both kinds the mother-of-pearl is set off by black wedge-shaped pieces of horn or bituminous composition. Rarer objects are the thrones or chairs of carved and lattice-work, used formerly for a bride's robes. A seat of lattice-work (*dikka*) also stands in the entrance of many houses for the door-keeper.

The age of the wood-work, other than carved, is not easy to determine. The meshrebiyas, exposed to the weather, do not seem able to last very long, and we shall be probably right in assuming none of them to be older than the seventeenth century. The more elaborate and squarer form of meshrebiya, used in mosques, is of course older than this, and may date from the fourteenth century. The ceilings vary in date with the mosques or houses to which they belong, but they are not found in mosques earlier than the fourteenth century, and no Cairo houses can be ascribed with certainty to even that period.



FIG. 67.—CEILING OF A MESHREBIYA.
(South Kensington Museum.)

CHAPTER VI.

IVORY.

IN the preceding chapter we have often had occasion to mention inlaid lines of ivory set round carved wooden panels, and even whole panels of ivory set in wooden borders (pp. 117—120). The artists of Cairo preferred this combination of substances, and the use of ivory alone is rare, though the Egyptians had every opportunity of obtaining large quantities of it through the Sūdān trade. In the Coptic churches of Old Cairo, indeed, we find ivory more prevailingly used than in mosques or Muslim houses. Mr. Butler thus describes the screen of the church of Abu-s-Seyfeyn:*

“It is a massive partition of ebony, divided into three large panels—doorway and two side panels—which are framed in masonry. At each side of the doorway is a square pillar plastered and painted; on the left is portrayed the Crucifixion, and over it the sun shining full; on the right the Taking Down from the Cross, and over it the sun eclipsed. . . . In the centre a double door, opening choirwards, is covered with elaborate mouldings, enclosing ivory crosses in high relief. All round the framing of the doors, tablets of solid ivory, chased with arabesques, are inset, and the topmost part of each panel is marked off for an even richer display of chased tablets and crosses. Each

* *The Ancient Coptic Churches of Egypt*, vol. i., pp. 86, 87.

of the side panels of the screen is one mass of superbly cut crosses of ivory, inlaid in even lines, so as to form a kind of broken trellis-work in the ebony background. The spaces between the crosses are filled with little squares, pentagons, hexagons, and other figures of ivory, variously designed, and chiselled with exquisite skill. The order is only broken in the centre of the panel, where a small sliding square, is fitted; on the is inlaid, above and below, a tablet containing an Arabic scroll-work. In no through-carving; the in the form required—next the design is chased the ivory ground and a piece is then set in the round with mouldings of ivory alternately. It is of the extraordinary rich details, or the splendour Mr. Butler ascribes this with the tradition of the tury, and though the style lead us to infer a date centuries, his authority be disregarded.

the church called El-



FIG. 68.—CARVED
IVORY PANEL.
(S. R. M.)

window, fourteen inches slide a single large cross low which is an ivory bic inscription interlaced these ivories there is block is first shaped cross, square, or the like; in high relief, retaining raised border; and the wood-work and framed ebony, or ebony and difficult to give any idea ness and delicacy of the of the whole effect." screen, in accordance church, to the tenth cen- of the arabesques would later by two or three tive statement must not

Another screen, in Mu'allaka, in the fortress of Babylon, is unique of its kind. "Above and below are narrow panels of carved cedar and ebony, alternately, chased with rich scroll-work and interwoven with Kufic inscriptions; the framework is also of cedar, wrought into unusual star-like devices, and the intervals are filled with thin plates of ivory, through which, when the screen was in its original position, the light of the lamps behind fell with a soft rose-coloured glow, extremely pleasing.



FIG. 69.—CARVED IVORY PANELS OF A PULPIT DOOR.
(South Kensington Museum.)

Face p. 34.



There is an almost magical effect peculiar to this screen, for the design seems to change in a kaleidoscopic manner, according as the spectator varies his distance from it." * This changing effect has often been remarked as a characteristic of Saracenic geometrical design, and is due to the combination of large and small patterns in such a manner that different parts of the design stand out more conspicuously at varying distances.

These Coptic screens are undoubtedly the models upon which the ivory carvings of the mosques were founded. Probably Coptic artists were employed for the work just as Coptic architects had been proved the most skilful for the planning of the mosques themselves. There is a close analogy between the style of the Coptic screens and that of the Muslim pulpits, with the necessary exception that the cross which forms so prominent a feature in the former is omitted in the latter, and the designs are restricted to geometrical patterns filled in with arabesques. A fine example of the Muslim development of the art is seen in the pair of pulpit-doors in the South Kensington Museum (nos. 886 and 886a, of the St. Maurice collection), one of which is engraved in part in fig. 69. The doors in their present modern frame-work are 6ft. 7in. high, and each leaf is 1ft. 6in. wide. The design is marked out by wooden mouldings, and the interstices are filled with ivory tablets, carved with delicate arabesques, no two of which are the same. Above and below each leaf is a horizontal panel filled with ivory scroll-work. It will be noticed, that fine as is the style of carving, the effect is harder than that of the best period of wood-carving in Cairo, though these doors probably belong to the same epoch, the fourteenth century. The stiffness is the fault, one must conclude, of the material, not of the artist; for the men who chiselled the panels of El-Māridāny and Kūsūn (pp. 117—120) were in all probability the mates of those who carved the ivory panels of these doors. The designs are also very similar, though varied with the

* *The Ancient Coptic Churches of Egypt*, vol. i., p. 212.

marvellous ingenuity of the Saracenic artist. The softer material, however, seems to have lent itself more readily to the expression of these graceful outlines.

The four panels (no. 885) of the St. Maurice collection, one of which is engraved in fig. 68, are in a similar style. The work is of the late fourteenth or early fifteenth century type, but very well executed, and much softer in effect than those described above; and the panels have this peculiarity—a sign of rather late date—that the designs of all four are absolutely identical. Another style of wood and ivory pulpit-door is seen in fig. 70, where small panels of perfectly plain ivory alternate with pentagonal mosaics of inlaid ivory and ebony tesserae. This style may be referred roughly to the fifteenth century, but we are at present without exact evidence as to the precise date. The beautiful panel of inlaid ivory and ebony (fig. 71) is from a table in the Arab Museum at Cairo, and belonged to the mosque of Umm-Sha'bān, built in 1368.

Ivory work, except in combination with wood, is rare in Egypt. Two pieces, which I had the good fortune to secure in Cairo in 1883, are now in the South Kensington Museum, and both are dated. The first is a little cup, engraved with a band near the lip, containing between scroll borders a verse from the Korān, lxxvi. 5—*ان الابرار يشربون من كأس مزاجها كافور* "Verily the righteous shall drink from a cup flavoured with camphor," describing the drink of the blessed in Paradise; while on the bottom we read, "Made by Mohammad Sālih at El-Kāhira [Cairo] in the year 927," A.D. 1521. The second is an ink-horn (fig. 72) of the usual Eastern shape, to hold ink in the cavity at the head, and reed pens in the handle; and worn in the girdle by the Egyptian scribes and learned men, who do their writing often on the backs of their donkeys. The head is covered with floral ornament of a late style, and the sides with Arabic verses between scroll borders; and on the bottom of the head are inscribed the words, "Made by the Seyyid Mohammad Sālih at Misr [also Cairo] in the year 1082," A.D. 1672.



FIG. 70.—INLAID IVORY AND EBONY DOOR.
(South Kensington Museum.)



The *varsen* are these :—

لا تحسبوا ان حسن الخط ينفعنى
ولا سباحة كف الحاتير الطائر
وانما انا محتاج لواحدة
لنقل نقطة حرف الخاء للطائر

"Think not the grace of the pen's my desire,
Or the Arab chief's generosity :
For ~~one~~ thing only do I require,
That the point be moved from the *h* to the *t*."

The meaning is, that by transferring the diacritical point of الخط ("penmanship" or "writing") to the second letter, thus الحظ, the word is changed to "good fortune." The Arabic gives the name of *Hâtim Tâi*, the typical Arab hero, renowned for his prodigal hospitality and unselfish chivalry, and the subject of numerous Eastern legends and poems.

It looks as though the art of ivory carving had remained hereditary in one family, and the second Mohammad Sâlih were a descendant of the first ; but the names are common enough, and the identity may be purely accidental. These are the only specimens of Cairo ivory vessels with detailed dates and names with which I am acquainted. They are late, but for that reason all the more interesting, for our Museums are particularly poor in specimens of sixteenth and seventeenth century carvings.

The ink-horn of the shape shown in fig. 72 is usually made of brass or copper, but some of the better sort are of silver, though I have never seen one of this material ; and one is mentioned in history as made of glass, but this was taken as a proof of extreme humility. A not uncommon kind is made of plain ivory, inlaid with little brass annulets filled with coloured ivory and brass mosaic, in the style familiar on Shirâz muskets ; but this is not of Cairo manufacture. An example is shown in the South Kensington Museum.

Ivory was also used as a base on which silver plates were laid.

Such is the style of the Bayeux casket (illustrated in *Prisse*, iii., pl. 157), which belongs probably to the eleventh century. Figure carving in ivory is not found in the Egyptian school of art, but it certainly obtained in Spain, as is proved by the splendid ivory box made for Ziyād ibn Aflah in A.H. 359, A.D. 969, now in the South Kensington Museum, on which are various spirited representations of figures and animals, even winged centaurs, closely resembling the Mōsil decoration of metal objects. There can be little doubt that, wherever made, this box represents the influence of Mesopotamian artists, probably conveyed through the Fātimy Khalifs of Africa to Spain and Sicily.

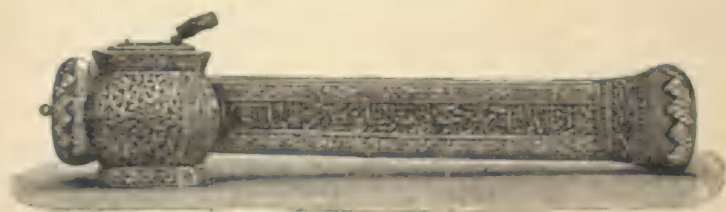


FIG. 72.—IVORY HORN-SHORN.
(*South Kensington Museum.*)



FIG. 71.—INLAID IVORY AND EBONY PANEL FROM A TABLE
(Cairo Museum.)

CHAPTER VII.

METAL-WORK.

1. *Brass and Bronze Inlay.*

SARACENIC metal-work, so far as we are acquainted with existing dated specimens, begins in Mesopotamia in the early part of the thirteenth century of our era. That the art must, however, have been developing for centuries before this date, possibly at other places, is clear from the perfection of the workmanship displayed on the very earliest pieces; indeed, the oldest are as a rule the most elaborate and finished. Moreover, there is every reason to believe that the art of metal-working, engraving, and chasing, existed in a continuous development from very ancient times in the region of the Tigris and Euphrates. The earliest Saracenic bowls are decorated with hunting-scenes which remind one at once of the favourite designs of the Assyrian bas-reliefs; the bronze gates of Balawat, and the Sassanian cups which have come down to us,* present many points of close resemblance to these first examples of the Saracen artist. There was, however, a special reason for a notable extension and development of the art in the thirteenth century.† During the earlier ages of Mohammadan rule, though the Khalifs were not remarkable for their piety or observance of the laws of the Korān, a certain decent outward appearance of conformity to the regulations of Mohammad seems to have prevailed. Among other prohibitions, that which forbade the representation in art of animate creatures was particularly observed. The rulers may have cared little about such laws, but the people

* A. de Longpérier, *Œuvres*, i., 71, 254.

† Compare what has been said above, pp. 126 ff.

probably had not yet shaken off the impression of Mohammad's puritanical teaching, and there were enough orthodox Arabs about the court of the Khalifs to make any flagrant deviation from such a law as that which proscribed images dangerous in the extreme. The coins of the period prove that this was the case. 'Abd-el-Melik's abortive attempt to follow the Byzantine model, and place his own image on the coinage, was succeeded by a strictly plain currency, on which no approach to the representation of a living thing appeared for five centuries. But when the Turkish guards, whom the Khalifs unwisely imported for their own safety, were followed by Turkish hordes, who founded dynasties and by degrees abstracted the whole power of the Khalifs, the observance of the law against images became less stringent. The Turkish immigrants were Mohammadans, but they did not adhere to the strictest sect of the Muslim Pharisees, and took a lenient view of the minor regulations of Islām. We cannot be too thankful to them for this happy indifference, for we owe the highest development of Saracenic art in the East to Turkish or Tartar rulers. Among the earliest to introduce the representation of images on the coinage were the small dynasties of Mesopotamia, who followed in the wake of the great Seljūk invasion. The large copper coins of the Urtukis and Beny Zenky abound with figures of men, saints, princes, and beasts, some derived from Byzantine coins, others taken from the symbols of astrology.* Christ and the Virgin are among the images employed by these indiscriminating coiners, while such emblems as the two-headed eagle and the centaur-like figure of Sagittarius show an oriental and probably Assyrian derivation. Coins of this kind begin to be common in the twelfth century, and it is not hard to trace a connection between this sudden appearance of imaged coins and the almost contemporary fabrication of metal bowls and cups and caskets bearing similar images and emblems. The two-headed eagle, the signs of the zodiac, the

* S. Lane-Poole, *Catalogue of Oriental Coins in the British Museum*, vol. iii.; *International Numismata Orientalia*, vol. i., pt. 2.

images of aureoled saints or horsemen engaged in the chase, are found alike on coins and vessels, but in much greater abundance and variety on the latter, where the large surfaces naturally afforded more room for their display. We cannot be far wrong in assuming that the art of metal-working, which had for ages been characteristic of Mesopotamia, where the needful mines were found,* after slumbering under the Khalifs, received, like the coinage, a sudden stimulus from the advent of the Turkish dynasties. Up to the twelfth or thirteenth century the arts doubtless lingered on under the stigma of the orthodox, and it needed only the favour of the powerful, especially of princes so fond of display and gorgeous surroundings as the Tartar dynasts, to give a new life to the long-restrained skill of the Mesopotamian artists, and to encourage them to higher efforts.

The Mesopotamian, or, to use a shorter term, derived from its chief seat, the Mōsil style is characterized by a predominant use of figures of men and animals. Aureoled horsemen engaged in the various methods of the chase, to which the Persians had ever been addicted, surround the bowls or other vessels in broad bands; with lance or bow, with leopard or chitah on the crupper, with hawk on wrist, or attended by hounds, they pursue the bear or lion or antelope or other quarry; crowned and aureoled princes, seated cross-legged on high-backed thrones, attended by pages, and holding the forbidden wine-cup in the hand, occupy panels or medallions; musicians with cymbals, lute or pipe, dancers, and other types of festivity, or the personified Signs of the Zodiac combined with their ruling planets, vary the monotony of the hunting-scenes; and combats between animals, birds, and men, are among the subjects of the engraver's skill. In one instance the bottom of a large bowl is covered with the spirited represen-

* Mesopotamia and the adjacent districts have been famous from remote antiquity for copper mines, and in the present day near Māridin is a kiln where the copper is refined which is extracted from the mine of Argana Ma'din; and copper vessels are still made at Tökāt, and exported to Syria and Egypt.

tation of a sporting party on the water: a boat is pulled by three men, two others shoot wild ducks with their arrows, another is engaged in cutting the throat of a wounded duck, a seventh sits at the mast-head on the look-out, and another dives beneath, pursued by an alligator.* Long chains of beasts of the chase, lions, panthers, chitahs, antelopes, hounds and birds, pursue one another in narrow borders, and bands of scroll-work or twist-pattern divide the different zones of the ornamentation, while the intervening spaces are filled with ducks and other water-fowl. The ground is generally covered with bold arabesques, or with a kind of hook or key pattern, and little medallions or annulets filled with a simple rose design serve to divide the borders into equal sections. Arabic inscriptions, in the Naskhy character, run round the



FIG. 73.—INSCRIPTION INTERWOVEN WITH FIGURES ON THE "BAPTISTERY OF ST. LOUIS."

vessels in narrow bands, sometimes (but rarely) having the tops of the letters chased in the image of human faces or interwoven with the legs of an upper border of beasts of the chase (fig. 73). Occasionally a meaningless inscription, consisting of a few decorative letters frequently repeated, takes the place of the genuine inscription, and so far is this from being an indication of late date, (though it is perhaps most common on late work,) that it is found on objects which undoubtedly belong to the thirteenth century, and occurs, for example, on a cup found buried with the body of Bertrand de Malzand, Abbot of Montmajour, who died in that century.† As a rule, the shoals of fish, which are

* In the Arsacid relief of Takhti-Bostan, the king hunts from a boat, exactly as on this bowl.

† A. de Longpérier, *Œuvres*, i. 390.

so common at a slightly later period on the bottom of drinking vessels and other utensils intended to hold liquids, do not occur on the early Mōsil work.

But the main characteristic of Mōsil and all early Saracenic metal-work is the lavish use of silver inlay. Gold does not appear to have been employed by the Mōsil artists, but in silver they were prodigal. Every part of the design was covered with plates of the precious metal, and the intervening spaces, amounting to little more than narrow lines, were generally filled with a black bituminous composition which concealed the copper or brass, and set off the brilliancy of the silver designs. The silver inlay is as nearly as possible let in to the level of the brass base, and is secured by no pins or solder. The delicate hold obtained by the process employed has unfortunately in most instances permitted the greater part of the inlay to escape in the course of wear, and we are thus enabled to observe accurately the method of inlaying adopted by the Saracen workmen. This consisted, in all work of the best period, in cutting away the surface to be inlaid in planes deepening towards the edges, slightly undercutting the edges themselves, and then forcing the silver into the cavity thus excavated, and burnishing the rebated edges over the inlaid plaque.* In the

* This inlaying, or rather the precious metal thus inlaid, is termed in Arabic *keft* كَفَتْ (and conj.) means to plate or cover with a leaf of metal. We read in El-Makrizy of النحاس مَكْتٌ بِالذَّهَبِ وَالْفِضَّةِ, "Copper, plated with gold and silver;" نحاس امّير مَكْتٌ بِالْفِضَّةِ, "Brass, plated with silver;" and elsewhere of فولاد مَكْتٌ بِالذَّهَبِ, "Steel, plated with gold;" and saddles, bridles, and precious stones, مَكْتٌ, "plated" with, or set in, gold and silver. انضمام (from مَطَم) means "incrustation," "inlaying;" and مَطَمٌ practically the same as مَكْتٌ, only it does not necessarily imply metal-plates. El-Makrizy writes—النحاس مَوَّاهٌ مَطَمٌ بِهِ اَوَانِي النحاس من الذهب والفضة, which shows that مَطَمٌ is applied to inlaid metal-work as well as مَكْتٌ. But it is also used for inlaid ivory and wood: خشب مَطَمٌ بِالْعِاجِ وَالْاَبْنَسِ وَنَحْوِهَا, "Wood, inlaid with ivory and ebony." He made a box of ebony inlaid with mother-of-pearl." See El-Makrizy, *Hist. des Mamelouks*, (Quatremère,) ii. i. 114, note.

case of large surfaces, in order to get a better hold, the edges were not only undercut, but slightly toothed or serrated, but this is by no means universal, and is often a sign of a later repairing of the vessel by less skilful hands. In the inlaying of very narrow lines, where there was hardly room for undercutting, a series of notches were punched along the line with an oblong-headed instrument, and the inlay beaten or pressed with agate or jade into the holes, which served to hold the thin thread. The earliest work is never treated in the mode which became common in Venetian and later inlay, by the process of stippling the whole of a large surface with little triangular notches, which served like teeth to hold the metal plates. Whenever we find such stippling on ancient work, it is a sign that the inlay has dropped off, and has been restored by a later hand. The only approach to stippling in early work is the punching oblong (not triangular) notches in inlaying thin threads of silver or gold.

M. Lavoix, in an interesting paper on "*Les Azziministes*," * distinguishes three methods of inlaying; (1) incrustation, where a thread of gold is inserted in an under-cut groove; (2) plating, where a plate of metal is enclosed between slightly raised walls, which, he says, is the Damascus manner; and (3) where the workman runs a sort of spur-tool rapidly over the surface to be inlaid, so as to make a series of notches, and then presses on the thin leaf of metal.† The last method, he adds, is that chiefly in vogue in Persia, or *Al-Ajam*, to give the country its Arabic name, whence the art came to be known in Europe as *Alla gemina*, *Algerminia*,

* *Gazette des Beaux-Arts*, xii. 64—74.

† With regard to these distinctions, I ~~must~~ say that the first, which is real Damascening, is the only method employed on early Saracenic work, and it is used alike for large surfaces and small; but *not* for mere threads, which are, I believe, generally fixed by the punched mode described above. Raised walls, mentioned in M. Lavoix's second method, are not known to early Saracenic art, and certainly do not apply to Damascus work; they only came in when the Venetian style of cutting away the whole surface except the pattern became the vogue. The third method is the late and bad one.

All Azzimina, and the inlayers took the name of *Algemina*, or *Azzimina*. The Comte de Rochechouart* describes the three processes of damascening or inlaying still employed in Persia. He distinguishes the processes as follows: (1) *Zarkhonden*, damascening in relief, where the base is cut out and the edges under-cut, and the precious metal pinned on with gold nails, after which the surface is chased. (2) *Zarnichanest*, damascening in the flat, where the same process is used, but the gold is pressed in with a piece of jade, and all that projects is burnished off. (3) *Zarkouft*, which, he says, is the most usual way, where the design is traced with the graver, but is not cut out, and the surface is toothed with a special tool, and the gold leaf, which is used very thin, is pressed on with jade, and then exposed to the fire till it sweats, after which it is again burnished with jade, and the process is repeated until the incrustation is firmly fixed. The last process is very cheap, as little gold is used. It is evident that in this last process (which preserves only the name of the old *Kest* work), we have an inferior development of the stippling process employed by the Oriental artists of Venice, and by the late repairers of Mōsil work. The difference is, that instead of using an honest plate of gold or silver and really inlaying it in a sunken bed, relying on the stippling only to keep the central portions down, the modern Persian method depends wholly on the stippling and the heating, and is not inlay at all, but a cheap imitation. Another process, mentioned by Sir Digby Wyatt (in Waring's *Art Treasures*, 1857), is described as consisting in punching little holes round the outline of the surface to be covered, and burnishing down the silver till it is forced into the holes and thus held; but I cannot recall any example of this process among the Saracenic objects I have examined.

When with incredible labour the whole surface of a bowl or other object had been excavated in the intended designs, and

* *Souvenirs d'un Voyage en Perse*, 1867, pp. 236—9.

the edges had been under-cut, and the silver plates burnished into the recesses thus prepared, the work of the Mōsil artist was only half done. He had next to chase the surface of each plate with details which could not be represented in the outline. The faces and dress of the horsemen and princes, the fur of the beasts, the feathers of every bird, and countless other details, had to be slowly and minutely engraved on the surface of each little plate of silver, till the extraordinarily delicate and finished effect which is characteristic of true Saracenic work had been attained. There were no half-measures, no scamped work, with the Saracen artists; every part of the inlay, if only the size of a pea, if it represented anything but the smooth face of an Arabic letter, must be chased; and these old-fashioned workmen had not yet learned the economical practice of modern artisans, who neglect whatever part is not likely to be seen, but took as much pains with the portions of their work that were not to be seen as with those that were meant to be always visible. Mahmūd the Kurd, a Saracen artist of Venice, carried this principle of honest work so far, that when he made use of the stippling process to retain his silver plates in their places, he traced his stipples in a graceful scroll-pattern, although he knew that they would immediately be concealed by the silver they were designed to hold. If the silver had not accidentally been worn off, we should never have suspected the true artist's spirit hidden beneath.

What has been said about the processes of inlaying and chasing applies to the whole of the best period of Saracenic art in the East, to the Syrian and Mamlūk styles, as well as to the Mōsil work, but the predominance in 14th century Mamlūk work of large inscriptions, which need no chasing, instead of the multitudinous figures of the Mōsil artist, renders the later work slightly less elaborate, though even here the prevalence of ducks and birds in the ground-decoration demands prodigious labour in chasing.

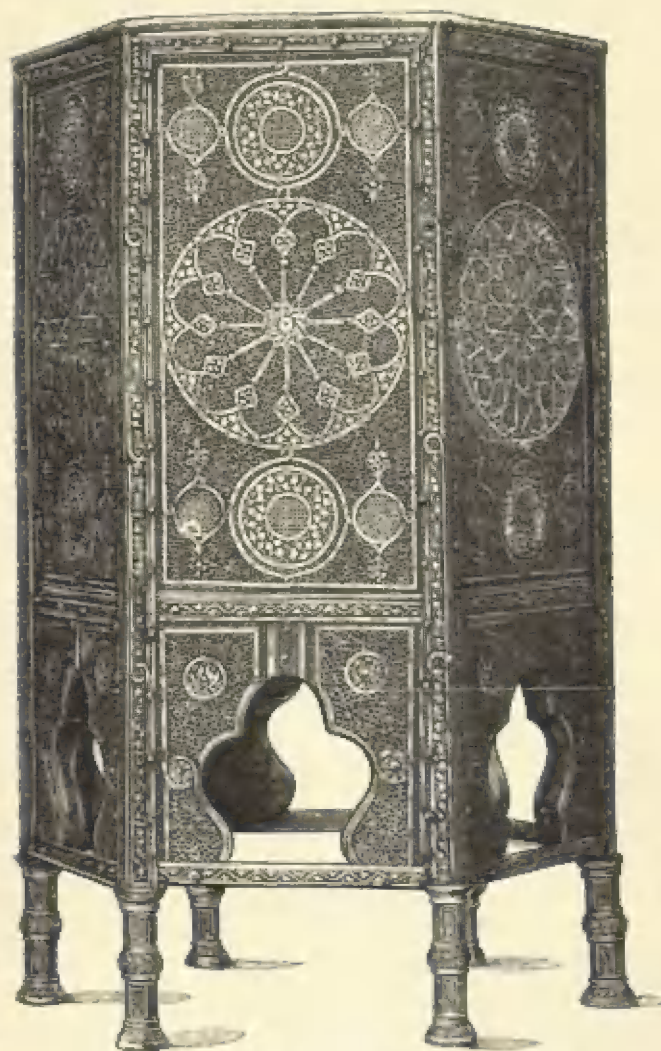


FIG. 74.—TABLE FROM THE MARISTAN OF KALAUN.
Thirteenth Century. (Cairo Museum.)

Between the Mōsil work and the commoner Mamlūk style, I have distinguished a class to which I have ventured to give the name of *Syrian*. It combines some of the characteristics of the earliest Mōsil style with others that belong to the succeeding art of the Mamlūks. Thus it shows on some examples the usual Mōsil decoration of figures, while it presents numerous examples of the confronted birds, or fighting cocks, and groups of four or six ducks or other fowl arranged in a circle with their heads together, and also the rosette of flowers and leaves which remind one of Damascus titles,—all of which are typical of the later work of the Mamlūks. One special ornament is to be noticed in this class: this is a medallion filled with a sort of key ornament, consisting of a number of Z's arranged in a circle, and inlaid with gold wire. These little medallions occur in large numbers all over the writing-boxes, which appear to have been the special product of this school of metal-work, and they seldom recur in similar abundance at any other period. The reasons which lead me to regard this class as the fabric of some Syrian city, probably Damascus or Aleppo, are these:—the style is certainly distinct from both that of Mōsil and the later art of Cairo; gold inlay is historically known to have been a favourite decoration with the Damascus artists, of whom, according to M. Lavoix, there was a distinct school;* the rosettes of flowers and leaves have a decidedly Damascus look; the only name, or rather title, that can with probability be identified on the objects classed under this division, appears to refer to a prince of Aleppo, whose slave or Mamlūk made the writing-box described on p. 185.

The third, or Mamlūk, class is at once the most numerous and best identified by inscriptions. The greater number of examples

* "I have seen," says Nāsir-i-Khusrau, in the 11th century, "copper bowls of Damascus containing each 30 menn of water; they shine like gold. They tell me that a woman owns 5000 of them, and lets them out daily for a dirhem a month."

belong to the time of the Sultan En-Nāsir Mohammad ibn Kalaūn and his many and wealthy courtiers, the Nāsiry Mamlūks,



FIG. 75.—PANEL OF TABLE EN-NĀSIR, SON EN KALAŪN.
(Cairo Museum.)

and it is probable that the style acquired its distinctive character during this period of sumptuous magnificence in the fourteenth

century. Indeed we shall see that Beysary, who lived through Kalāūn's reign, employed the art of Mōsil for his perfume-burner. Kalāūn, again, to judge by his carved doors in the Māristān, preferred the Mōsil style of figure-work, which still probably held the market as the best of its kind. It is, therefore, not unreasonable to place the beginning of what I have called the Mamlūk style at the accession of En-Nāsir Mohammad, who reigned from A.H. 693 to 741 (A.D. 1293 to 1341). From this time onwards, at least until the conquest of Egypt by the Othmānly Turks, the Sultāns and Amirs of Egypt delighted to surround themselves with exquisitely chased and inlaid vessels and furniture. The Museum at Cairo contains two inlaid tables (figs. 74 and 75), one of which bears the name and titles of the Sultan En-Nāsir ibn Kalāūn, in brass filigree work, inlaid with silver medallions, panels of flowers, and geometrical designs, and Naskhy and Kūfy inscriptions. These tables were used to support such a tray as the splendid specimen preserved in the South Kensington Museum, described at p. 192, on which the Sultān's repasts, and the wine service that followed, were spread in the usual Eastern manner. The doors of the mosques of this period were covered, not with the rough but effective plaques of *cast* bronze, which we see on the doors of Beybars (figs. 83-6) in the thirteenth century, but with *cut* bronze plates, chased and sometimes inlaid with silver. Mosque lamps, when they were not of enamelled glass, were of exquisite filigree silver inlay (fig. 76). Large chandeliers hung in front of the niches of many of the mosques, made of *repoussé* bronze in an arabesque design and covered with chasing, or of iron filigree work (fig. 78), with zones of shining copper, bright as red gold. Korāns were enclosed in gold cases adorned with precious stones.* The utensils of the royal and aristocratic palaces were of inlaid brass and bronze; large bowls or tanks, small cups and trays, censers, candlesticks of ungainly form but

* El-Makrizy, *Mamlouks*, ii. 246.

beautiful workmanship, ewers, caskets, writing-boxes, all were covered with silver ornament, arabesques, flowers, inscriptions, and geometrical designs, with, not seldom, the heraldic badges of their owner. The specimens described below range from the beginning of the fourteenth to the end of the fifteenth century, when the art of inlaying was already on the wane; but an examination of the numerous collections, public and private, of Europe would doubtless carry the history of the art to a somewhat later date. In the present day the Cairo workmen engrave brass trays and vessels of considerable merit, and if they do not now produce to any appreciable extent the inlaid work of their ancestors it is probably because it is too costly for most purchasers, and is neglected by the modern Pasha.

There can be no doubt that most of this Mamlūk work was made at Cairo. Although the figured work of Mōsil, taking a new start in the 12th and 13th centuries, seems to have at first dominated the artists of the Mohammadan East, and to have influenced schools of design far from its centre, there is no question that inlaid metal-work existed in Egypt before the 13th century. The inventory of the palace of the Fātimy Khalif El-Mustansir, in the 11th century, contains numerous entries of inlaid metal-work,—gold plates enamelled in colours; writing-boxes in gold and silver; great vats for washing clothes, standing on three legs, representing animals; mirrors inlaid with gold and silver in borders of precious stones; quantities of vessels adorned with chased gold; six thousand gold narcissus vases; and even row-galleys coated with gold plates. Nāsir-i-Khusrau, who saw this Khalif holding a state reception, says his throne was covered with gold, on which were depicted scenes of the chase, huntsmen and dogs, and inscriptions; the balustrade was of gold trellis-work of a beauty defying description, and the steps behind the throne were of silver.* The same

* *Sefer Nameh*, 158.



FIG. 76.—LAMP OF SULTAN BEYBAR II.
A.D. 1309—1310.



observer tells us of a magnificent silver chandelier placed in the mosque of 'Amr by the Khalif El-Hākīm, which was so large that they had to break down the door to get it into the mosque.*

Fātimy work spread to Sicily, where we find very early and singularly perfect metal-work made by Mohammadans. The Bayeaux ivory casket (Prisse, iii., pl. 157), with its finely chased silver plates, has an unmistakable Fātimy inscription in combination with confronted birds, peacocks beak to beak, parrots, and other Mōsil characteristics. The ivory box of Ziyād ibn Aṣṣah, in the South Kensington Museum, with the date 359 (A.D. 971), is probably due to Fātimy workmen. The crystal vase preserved in the treasure of St. Mark at Venice bears the name of El-'Aziz, a Fātimy Khalif of the last quarter of the tenth century, and is closely similar to another crystal vase of St. Denis, now in the Louvre, which bears inscriptions of the same character as those on the Nürnberg mantle, which was made at Palermo in 1133 under the rule of Roger.† These crystal vases, of which examples with the name of El-'Aziz are mentioned by El-Makrizy, and the embroidered silks, show a power of design and execution which implies similar proficiency in metal-work. In fine, there is no doubt that the artists of Egypt under the Fātimis were skilled to a degree that found no parallel in the handicrafts of Europe. The art may have succumbed for a while to the influence of the Mōsil school, which would naturally be imported by rulers like Saladin and his successors, who came from the very region of the Mōsil silversmiths; and the Fātimy work may have owed much of its perfection to the teaching of Mesopotamian artists of a date earlier than any existing specimens; ‡ but it is impossible to

* *Sefer Nameh*, 149; El-Makrizy, *Mamlouks*, ii. 250.

† A. de Longpérier, *Œuvres*, i. 453-5.

‡ We know that Basra painters were brought to Egypt in Fātimy times. El-Makrizy tells us that the "Mosque of the Karāfa," erected by Taghrīd Darzān, the wife of El-Mu'izz, was built by a Persian architect, El-Hasan El-Fārisy, and resembled the Aḥḥar. Its chief gate was cased with iron, and

overlook the existence of an ancient skill in arts of all kinds in Egypt itself, and to ascribe much of the merits of the Mamlūk work to the traditions of the Fātimis. The derivation is the more likely, inasmuch as the Mamlūk work betrays more of the arabesque and floral influence of the Egyptian school, as we see it displayed in the older mosques of Cairo, than that of the figure ornament of Mōsil. The ducks of the Mesopotamian swamps indeed survive and are emphasized, in deference, as I believe, to the name of the founder of En-Nāsir's dynasty, Kālāūn (the "duck"); but the general character of the Mamlūk style is certainly different from that of Mōsil, and partakes of the general Saracenic character of arabesque and geometrical design, which was no doubt inherited from the earlier rulers of Egypt, and was probably to a large extent fostered by skilful artists among the Copts.

It is unfortunate that so few examples of Coptic art can be ascribed with certainty to fixed dates; for the establishment of the existence of an early Coptic school of art, derived from Byzantium, would explain much that is obscure in the history of Egyptian art. From what Mr. Butler has been able to bring together in his valuable work on the *Coptic Churches of Egypt*, it seems clear that, however deeply the Saracens were indebted to the Copts for their designs and methods in wood and ivory carving and inlay, they did not draw their metal-work from the same source.

fourteen square brick gates led into the sanctuary: before each of them was an arch resting on two marble columns, in three parts, blue, red, and green, and other colours. The ceilings were decorated in various colours by workmen from Barra, and the Beny Mu'allim, the masters of El-Kettamy and En-Nāsūk. Opposite the seventh doorway was an arch on the two sides whereof were painted fountains with steps, which looked real. Painters used to come to see it, but could not imitate it. Two rival painters, El-Kasir and Ibn-'Aziz (of 'Irāk), were pitted one against the other by the Vizir El-Yūzūry; the first painted a picture of a dancing-girl in white robes on a black blind arch, as though she were inside it, and the second a similar girl in crimson robes on a yellow ground, as though she were standing out of the arch.



FIG. 77.—BASE OF CHANDELIER OF SUITAN EL-GHORY.
Beginning of Sixteenth Century. (Cairo Museum.)

THE
LIBRARY OF THE
MUSEUM OF
ART AND HISTORY
OF THE
CITY OF
NEW YORK

THE
LIBRARY OF THE
MUSEUM OF
ART AND HISTORY
OF THE
CITY OF
NEW YORK

Coptic metal-work shows no trace of affinity to the Saracenic bowls, trays, and censers described in the present chapter. The lamps, crosses, textus cases, and flabella of the Copts are more nearly related to European and Byzantine models than to contemporary Saracenic work. Yet the remark made above, that Coptic influence is traceable even in this art, holds good; since it is not uncommon to find one art suggesting ideas to another, and the Coptic designs in wood and ivory may have helped to form the Mamlūk style in brass and silver.

But it may be asked, especially when the prevalence of what I have described as a Damascus-looking rosette on Mamlūk work is considered, whether the metal-work of the Mamlūks was not manufactured at their second capital, Damascus, rather than at Cairo, and whether the old Fātimy art had not become extinct, to be succeeded by a Damascus school taking up new ground? There is no reason for supposing that the artists of Damascus stopped with the style described under my second class—if indeed that be really Syrian; doubtless they continued to execute equally fine specimens, and some of the objects bearing Mamlūk names may have been made at Damascus. But it should be noted that there is practically no metal-work of any merit at Damascus now, while the Cairo workmen are still skilful; and further, I can quote a passage from El-Makrizy which mentions a flourishing school of metal artists under the Mamlūks at Cairo.

"*Sūq El-Keftiyīn* ('market of the inlayers'). This market . . . contains a number of shops for the making of *keft*, which is inlaying copper vessels with silver and gold. There was a great sale for this kind of work in the houses of Miṣr [Fusṭāṭ], and the people had a keen relish for inlaid copper. We have seen it in such quantities that it could not be counted, and there was hardly a house in Cairo or Miṣr which had not many pieces of inlaid copper. The equipment (شورة) of a wedding was not complete without a *dikka* (or stand) of inlaid copper. The *dikka* means a thing like a divan-frame, made of wood inlaid with ivory and

ebony, or painted. Upon the dikka were set cups of yellow copper [brass] inlaid with silver, and the set consisted of seven pieces, some smaller than others, the largest holding about an ardebb of wheat. The length of the [bands of] silver inlay, on those of the larger size, was about a third of a cubit, and the breadth two fingers. And similar to this was a set of plates, in number seven, one fitting into the other, the largest reaching to about two cubits and more. And besides that [inlaid work was used for] lanterns, and lamps, and vessels for الإشنان, and basins, and ewers, and perfume burners. The price of a dikka of inlaid copper thus mounted up to 200 dinārs of gold. If the bride were of the daughters of the Amirs and the Wezirs and the chief secretaries and the chiefs of the merchants, the outfit of the marriage included seven dikkas, one of silver, another of inlaid copper, another of white copper, another of painted wood, another of china, another of crystal, another of *kedāky*—and this is of pieces of painted sheets [papier-maché?] brought from China: we have seen very many in the houses, but the art is now lacking in Misr.*

El-Makrizy goes on to describe the dikka of the Kādy 'Alā-ed-dīn, Muhtesib (or inspector of the markets) of Cairo, who married a daughter of the merchants, named Sitt El-'Amāim ("Lady of the Turbans"), of which the metal alone consisted of a hundred thousand pure silver pieces; and then mentions the wedding of a daughter of Sultan Hasan with an Amir of Sultān Sha'bān, and describes the fine trousseau she had, including a dikka, or service, of crystal, with a crystal bucket engraved with representations of wild beasts and birds, big enough to hold the contents of a water-skin. He concludes the section with the remark that "the demand for this inlaid copper-work has fallen off in our times, and since many years the people have turned away from purchasing what was to be sold of it, so that

* *Akhṭat* (Bulāḥk ed.), ii. 105.



FIG. 78.—LANTERN OF SHEYKH 'ABD-EL-BASIT.
(Cairo Museum.)

but a small remnant of the workers of inlay survive in this market." *

The passage above quoted from El-Makrizy establishes beyond doubt the fact that there was a school of inlayers and metal-workers at Cairo which survived, though in diminished numbers and prosperity, to his own day, *i.e.* about the year 1420; and the bowl (fig. 89) described below p. 198, with the name of Kāit Bey, fifty years later, must, if it is of Cairo workmanship, as I believe, have been made by the remnant the historian describes as still occupying the Sūk El-Keftiyin.

The general characteristics of the class which I have termed Mamlūk work are easily recognizable. The Arabic inscriptions are large and bold, and often, in the case of trays or other flat surfaces, radiating; small inscriptions containing the name or title of the Sultān on a fess, or perhaps a coat-of-arms, are enclosed in a medallion surrounded by a belt of flowers and leaves of the kind familiar on Damascus tiles; the ground is freely sprinkled with ducks and other fowl, and the bottom inside the bowls is generally ornamented with a shoal of fish, suggestive of the purposes for which the vessel was intended; the borders, generally of arabesque or flower scrolls, but sometimes of beasts pursuing each other, are broken by little whorls,

* When El-Makrizy speaks of white and yellow copper, he means of course brass or bronze. The greater number of the inlaid objects I have seen are of brass, and not of copper; though of course the word *En-Nahās* may be taken to include "yellow copper" (or brass) as well as pure red copper. In the South Kensington collection, which has had the advantage of the chemical tests of Dr. Hodgkinson (F.R.S.E., Professor at the Royal Military Academy, Woolwich, and of the Royal College of Chemistry), there are 20 brass objects to 8 of bronze, while what copper there is has a coating of an alloy of lead and antimony, which gives a grey appearance to the bowls thus treated. Some of the bronzes are zinc bronzes, *i.e.* contain zinc as well as tin, but as a rule they contain a large proportion of tin.

† There is no "market of the inlayers" in Cairo now; but workmen may still be found who can inlay copper with silver after a somewhat rude fashion, using a simple graver, and beating silver wire into the excavated design.

typical of the style, and there are no figures, except when the bowl or other vessel is intended for magical or astrological purposes. The style is very distinct, and once seen can never be mistaken.

There remains one more important branch of the history of Saracenic metal-work which must not be passed over, although it does not belong to our special subject of Egyptian Art. This branch is the Saracenic art of Italy, and notably Venice. It stands to reason that the exquisite workmanship of the chased vases and bowls of the Saracens must have soon found its market in Europe, and there is plenty of evidence that even before the Crusades the monasteries of the West had learned to prize chalices made by the infidels. A strong impetus must have been afforded by the Mohammadan proclivities of Frederic II., and his extensive employment of Saracen mercenaries in his campaigns against Gregory IX. These foreign troops were settled in various cities of Italy, where they left their traces in the names as well as in the blood and civilization of the places they inhabited. Thus Lucera came to be called *Nocera delli pagani*; thus Pisa, which was occupied by Saracen troops for the greater part of the thirteenth century, had its Oriental quarter, known as the "*Kinsica*," and even in the preceding century the poet Donizo had lamented the city being "*delivered over to Moors, Indians, and Turks*;" thus, too, there was a "*Via Sarracena*" at Ferrara. Saracenic artists lived at Genoa and Florence, and no doubt taught their art to the native workmen. Cellini says he copied Oriental poniards and improved upon them. Before the Crusades, Amalfi was the port whence pilgrims started for the Holy Land, and it was frequented by merchants from Egypt and the East. Here was opportunity enough for the introduction of Saracenic art into Europe. But beyond all these lesser entrances, Venice was the chief port for Eastern wares. Venice had her colonies in the coasts of the Levant, in Turkey, Greece, and Palestine; Venice had treaty rights in Egypt and Syria; Venice welcomed the merchants of



FIG. 79.—COVER OF SHERBET BOWL.
Made by Mahmud El-Kurdy at Venice. Sixteenth Century.
(South Kensington Museum.)

the East with equal privileges, and assigned them the old palace of the Dukes of Ferrara for their habitation; and at Venice the name of the "Fondaco dei Turchi" still survives.*

This almost Oriental city was the centre of Saracenic metal-work in Italy. Numerous salvers, cups, censers, and other articles, bear the unmistakable stamp of Venetian handicraft. The first and most salient distinction of this European branch of Saracenic work is in the form; the somewhat crude outlines of the true Saracenic bowls and candlesticks give place to more graceful and obviously Western shapes. In the decoration considerable alterations are made. In place of the inscriptional medallions or simple Mamlūk shields, European coats-of-arms are introduced; and the general treatment of the decoration is different. The arabesques remain, but they are more elaborate, and at the same time more mechanical. Silver inlay is sparingly used, and in many instances is entirely wanting; and the design is brought out, not by the contrast of metals, but by relief; the pattern being raised, and the surrounding ground cut away to a lower level. When there is inlay, it is generally in thin lines, secured between slightly raised and serrated edges, and further held by stippling the surface beneath the plate with little notches; but even then the design is in relief. The artists who produced this extremely delicate and beautiful work were at first and probably for some time Easterns. The most famous name we meet with on the sherbet-bowls and trays of Venice is that of Mahmūd El-Kurdy, who must have come from the Kurd country in the neighbourhood of the Euphrates, and was thus an heir to the traditions of the Mesopotamian metal-workers. The number of these Venetian and Italian specimens in the British Museum is considerable, and the series has been instructively arranged, so that one can trace the gradual transition from the Mamlūk style through the Venetian school to the other still semi-oriental salvers of mediaeval Europe. The South Kensington

* See M. Lavoix, *Les Annonciateurs*, *ubi supra*, for these and other indications.

Museum has also a few fine examples of the Venetian style of metal-work, including a specimen of Mahmūd El-Kurdy's skill which is engraved in fig. 79. Presently the native Italian workmen took up the art, calling themselves Azzimini—workers, *all'Agemina*, “in the Persian style”—as did Paulus Ageminius, who made the vase described by M. Lavoix, and Giorgio Ghisi Azzimina of Mantua, a great name among them: but in their hands the art changed character, and we have to go to the East again to see what remains of Saracenic art in the well-chased brass trays of Cairo, the floral decoration of Persian *narghilas*, and the rude arabesque bowls of Syria and Tōkāt.

I now proceed to describe some typical examples of Saracenic metal-work in our English Museums.

I. MÖSIL-WORK.

1. EWER.—*Brass inlaid with silver. Made by Shugā' ibn Hanfar, at Mōsil, in A.H. 629 (A.D. 1232).*


On a ground of key-pattern, zones of scenes of the chase and festivity, benedictory inscriptions, and the date (at the junction of the neck) نقش شجاع ابن حنفر الموصلی فی شهر الله المبارك شهر رجب فی سنة تسع وعشرين وستمائة بالموصل “Engraved by Shugā' ibn Hanfar of Mōsil, in the blessed month of God, the month Regeb, in the year 629, at Mōsil.” The figures are arranged in four zones, two of which comprise each ten seated figures, enclosed in quatrefoils, playing musical instruments, drinking from cups, &c.; while the other two zones are adorned with large mounted figures, to wit:—Upper large zone: 1. Horsemen with chitah on rump; 2. Figure seated on throne holding cup and attended by two squires; 3. Horseman with hawk on wrist, rabbit before horse, dog beneath; 4. Archer, bending one knee, shooting ducks; 5. Two men

fighting together with swords and round shields; 6. Horseman with beast on rump, a dog beneath; 7. Figure seated on throne, with two attendants, bird above; 8. Horseman spearing lion beneath horse's head; 9 and 10 were occupied by handle and spout (the latter missing). Lower large zone:—1. Man and woman in howdah on camel's back, and man leading; 2. Archer drawing bow, and woman in pillion, on a camel; 3. Two seated figures, one playing harp, the other pipe; 4. Horseman with sword and round shield combatting foot man similarly armed; 5. Seated figure, with jug held by servant; 6. Two women playing lute and cymbals; 7. Horseman, with uplifted arms, launching leopard or chitah from the crupper in pursuit of a deer; 8. Two women, with bottle, bowls, and fan; 9. Horseman shooting arrow down throat of boar; 10. Seated king, wearing turban, receiving homage of a man who prostrates himself before throne and kisses king's hand; a woman stands behind. Suns (with human faces) divide the ten figures of the lower zone, and floral medallions those of the upper zone. Between the two is a frieze of hunting-scenes broken by octagons of key-pattern: men and beasts and birds contending in fantastic attitudes. [Brit. Mus., Blacas, Coll. Reinaud, ii. 423.]

2. CENSER.—*Brass inlaid with silver.* Dated A.H. 641
(A.D. 1243).

Shape, a cylinder on three feet; with a dome-shaped upper part, hinged to open and shut, and perforated in a ~~zone~~ round middle. The upper part is divided into four zones. Beginning at the button at top, the first zone contains an Arabic inscription: — انا في باطنى الجحيم ولاكن ظاهرى قتر رائحات "Within me is hell-fire; but without float sweetest odours: it was made in the year 641."

The second zone is composed of a three-strand plait-pattern.

The third zone, pierced with small holes, is covered with arabesques, except four medallions which are filled with the characteristic key-pattern  &c.

The fourth zone has the same plait-pattern as the second.

The lower part is ornamented with three medallions (one reserved for a handle, which is missing) of key-pattern, with scroll border; and three arabesque quatrefoils, each surrounded by four stars; on a ground of key-pattern; and a benedictory Arabic inscription between the medallions and quatrefoils. - The feet are engraved with arabesques.

The bottom is of a later date, and is ornamented with an interlacing geometrical design in five star centres round central star. On the rim of the original bottom are traces of illegible inscription.

[B. M., Henderson, 678].

This is not a typical example of Mōsil-work; but its early date procures it the second place, and the key-pattern is characteristic, and will be found repeated on later specimens of unmistakably Mōsil fabric. With regard to the material, I should state that without chemical tests it is often impossible to be sure whether the alloy contains tin or zinc, whether, in other words, it is bronze or brass. The colour is a very unsafe guide, as I have proved during a series of chemical assays of the South Kensington collection performed by Professor Hodgkinson.

3. Box.—*Brass inlaid with silver.* Made for Bedr-ed-din Lulu, Prince of Mōsil, who reigned A.H. 631—657 (A.D. 1233—1259.)

Shape, cylindrical, with a hinged lid and hasp; edge of lid bevelled.

On the bevel of the lid is an Arabic inscription:—

عن لمولانا اتابك (؟) الملك الرحيم العالم العادل المؤيد المظفر المنصور
المجاهد المرباط بدر الدنيا والدين لؤلؤ حسام امير المؤمنين



COVER.



FIG. 80.—CASKET OF EL-'ADIL, GRAND-NEPHEW OF SALADIN.
Thirteenth Century. (South Kensington Museum.)



"Glory to our lord, the merciful king, wise, just, God-aided, triumphant, victorious, fighting for the Faith, warden of Islām, Full-moon of state and church, Lulu [Pearl], sword-blade of the Prince of the Faithful."

Round of the edge of the lid, a plait-border.

On the surface of the lid, a shoal of fish, interlaced, within quatrefoil, surrounded by a key-pattern, within scroll-border.

Round the lower part, in quatrefoil panels, four aureoled seated figures holding wine-cups, &c., alternating with four bold arabesques; these eight panels separated by other panels, enclosing a rosette of annulets, and beasts of the chase and water-fowl; ground of key-pattern; a fine arabesque border above and beneath.

[B. M., Henderson, 674.]

Here we have a vessel made for a well-known Atābek of Mōsil, presenting the key-pattern, plait-border, medallions, quatrefoils, &c., already noticed in No. 1, but with the addition of the aureoled figures, beasts of the chase, water-fowl, and fish, which now become characteristic of thirteenth century work. If the hunting and hunted animals are typical of the Assyrian and Sassanian source of the art, the fish and water-fowl are no less natural in the swamps of Mesopotamia.

4. Box.—*Brass inlaid with silver.* Made for the Ayyūby Sultan El-'Ādil Abū-Bekr II. (A.D. 1238-40) grand-nephew of Saladin. Fig. 80.

Cylindrical, the edge of the cover bevelled and engraved with an Arabic inscription:—عز لمولانا السلطان الملك العادل الزاهد العابد المويّد المظفر المنصور المجاهد المربط سيف الدنيا والدين "Glory to our lord the Sultān, the king, just, virtuous, devout, God-aided, triumphant, victorious, fighter for the Faith, warden of Islām, Sword of state and church, Abū-Bekr son of Mohammad son of Abū-Bekr son of Ayyūb."

The sides are covered with six aureoled figures:—1. Horseman, hawk on wrist, dog below; 2. Man spearing beast; 3. Horseman spearing beast on crupper; 4. Man spearing beast; 5. As 1; 6. Man slaying beast with sword.

On the cover, diaper of hexagrams enclosing six seated turbaned figures of the planets round central sun, within a zone of the Signs of the Zodiac. Scroll border beneath bevel. Prevailing ornaments,

scrolls and



An inscription on the bottom برسم الطشت خاناه العادلية "Made for the Tisht-Khānāh of El-'Ādil," refers to the magazine or store-room, where the dresses and utensils, &c., of the Sultan were kept, and the clothes washed. It was managed by a superintendent (طشتدار) and a number of servants (مبتار).*

H. $4\frac{1}{2}$ in., diam. $4\frac{1}{4}$ in. [S. K. M., 8508—1863.]

5. PERFUME-BURNER.—*Brass inlaid with silver.* Made for the Amir Beysary, a Turkish Mamlūk of Egypt. Circ. A.H. 670 (A.D. 1271). Fig. 81.

Globular: in two hemispheres, pierced with small holes, with a ring at the top.

The upper hemisphere is ornamented with five medallions enclosing two-headed eagles with spreading tails, separated by five smaller medallions filled with the key-pattern in the shape of a six-pointed star, the surrounding ground engraved with free arabesque scroll-work.

Above and below the design are two zones of Arabic inscriptions. Below:

مما عمل برسم المقر الكريم العالي المولوى (sic) الاميرى الكبيرى

* El-Makrizy, *Hist. des Mamlouks*, Quatremère, II. i. 115, π.

المحتومى المخدومى الفهسلارى المجاهدى المرباط (sic) المتاعزى
المؤيدى المظفرى

"Of what was made by order of his excellency, the generous, exalted, lord, great Amir, honoured, master, Marshal, fighter for the Faith, warden of Islam, the powerful, the God-aided the victorious." Above: بدر الدين بىرى الظاهرى السعيدى الشمسى المنصورى البدرى "Full-moon of the Faith, Beysary, the liegeman of Edh-Dhāhir, of Es-Sa'id, of Shems-ed-din, of El-Mansūr, of Bedr-ed-din." Within which, round the ring, is a zone of five two-headed eagles in open work.

Lower hemisphere, same as upper, but omitting المولالى, and substituting الإفسلارى for الفهسلارى, adding مى to المرباط, and affixing الشمسى to عز نصره.

[B. M., Henderson, 682.]

Lord Beysary was one of the retainers of Es-Sālih Ayyūb, the last ruling king of Egypt of the house of Saladin; rising by degrees, he became one of the most powerful of the Amirs of the time of Beybars. When El-Melik Es-Sa'id Baraka, the son of Beybars, was deposed, Beysary was offered the throne, and refused it. Kalaūn (1279-90) threw him into prison, whence he was liberated, after eleven years' captivity, by El-Ashraf Khalil in 1293, who restored him to his rank of centurion, or captain over 100 men, while the Amirs showered congratulations and presents upon him. Henceforward he styled himself El-Ashrafy, "follower* of El-Ashraf," instead of his old title of Esh-Shemtsy. On the death of Khalil he was again offered the throne, and again declined the honour. The Sultan Ketbughā allotted him sixty Mamlūks, to each of whom Beysary gave two horses and a mule. The tide

* The relative termination, *y*, affixed to a name, though originally implying the relation of slave to master (as *El-Ashrafy*, the Mamlūk of El-Ashraf), came to signify also the mere relation of a retainer, liegeman, or even courtier, without the notion of ownership. Beysary was called El-Ashrafy, as one of the courtiers of El-Ashraf Khalil, the Sultan's "man;" but he was not his slave.

of fortune changed in 1297, when the Sultan Lāḡin, moved to jealousy by a rival lord, again consigned Beysary to prison, where he died in 1298, and was buried in his tomb outside the Bāb-en-Nasr. He was lavish in his generosity, prodigal of immense gifts, and perpetually in debt to the amount of 400,000 dirhems (about £16,000); for he had no sooner cleared off one debt than he hastened to contract another. Generosity was his pride, and he would accept no remonstrances from his servants on his prodigality, but straightway dismissed the economical critic. He never drank twice out of the same cup, but took a new vessel each time. At the time of the accession to power of Kalaūn, Beysary is stated to have been wholly given over to wine and gambling. No man approached him in the amount and importance of his charities. His palace, Dār El-Beysariyeh, in the Beyn-el-Kasreyn, was originally intended, in late Fātimy times, for a residence for Frankish ambassadors, and one actually had resided there to receive certain tribute; but under Beybars, Lord Beysary Es-Sālihy Esh-Shemsiy En-Negmy began to rebuild the palace in 1261, and spent immense sums on adorning it. It occupied, with its stables, garden, and bath, about two acres (feddāns): the marbles employed for it were the best that were used in Cairo, and excellently wrought. The palace remained in the possession of his heirs till 1332. Kūsūn wished to own it, and asked the Sultan En-Nāsir Mohammad for permission to treat for it: it was valued at 190,000 dirhems, and the garden brought it up to 200,000; it subsequently passed through many hands, and at the time of El-Makrizy belonged to a daughter of Barkūk. The door of the house had a panel which was one of the most beautiful ever made at Cairo.*

It may be questioned whether the South Kensington box and Beysary's perfume-burner were made at Mōsil or at Cairo. The

* El-Makrizy, l. c. II. ii. 135 n.



FIG. 81.—PERFUME-BURNER OF BRASS,
Thirteenth Century. (South Kensington Museum.)

statement on the former that it was made "by order of El-'Ādil's tisht-khānāh" does not necessarily infer that the order was executed in Cairo: a Mōsil workman may have been employed at Mōsil or have been fetched to Cairo. The two pieces, however, are of the style which is identified by other examples as the fabric of Mōsil, and the two-headed eagle is a familiar device on Mesopotamian coin of the twelfth and thirteenth century; and if either was made at Cairo the artists must have been trained in the Mōsil school. That such work was sometimes done at Cairo is shown by an astrolabe in the British Museum, with the inscription—

صنعه عبد الكريم المصرى الاطرلابى بمصر الملكى الاشرفى
الملكى المعزى الشهابى فى سنة خلع هجرية

"'Abd-El-Kerīm made it, the Cairene [Misry], the Astrolabist, at Cairo, the [follower] of El-Melik El-Ashraf and El-Melik El-Mu'izz, and of Shihāb-ed-dīn, in the year 633."

This astrolabe has the key ornament, good arabesques, and of course planets and zodiacal figures; and is inlaid with silver and gold by under-cutting and toothed edges. The El-Mu'izz, whom he once served, was no doubt the prince of Mesopotamia, and El-Ashraf the Ayyūby of Diyārbekr, both of whom reigned in the first quarter of the thirteenth century. This would show that Mesopotamian artists came to Cairo, where there was, as we have seen, a *Sūk El-Keftiyin*, or market of the inlayers.

6. PERFUME-BURNER.—*Brass inlaid with silver.* No date.
[Thirteenth century.]

Shape similar to No. 2.

On the lower part are three arabesque frames, one occupied by handle, the other two filled with two aureoled figures seated cross-legged on high-backed thrones, with bird on either side;

between which are other medallions filled with quatrefoils ; and beasts of the chase ; ground of arabesque scroll-work.

On the top, nine seated figures holding cups, cymbals, &c.; and round the button a zone of Arabic inscription :—

العز الدائم والعمر السالم والاقبال الزائد

“Enduring glory and sound life and growing prosperity.”

[B. M., Henderson, 681.]

The seated figures on high thrones are similar to some on coins of Saladin, of 1190, and of the Urtukis of Māridin of the year 1230 : cross-legged figures are common on the Mesopotamian currency of the thirteenth century.

7. DEEP SALVER.—*Brass inlaid with silver.* No date.

[Thirteenth century.]

On a ground of key-pattern, a band of hunting-scenes, and cross-legged figures holding crescent moon, alternately, with occasional water-fowl, and a border of hounds. The hunting-scenes depict a horseman attacking, with drawn sword, a leopard on horse's rump, another shooting a hare with bow and arrow, a third cutting down a deer in front of the horse, and three pairs of seated Byzantine-looking figures, two of these holding cups and the third a hawk, while the companions hold sword or spear. Meaningless Kufic inscription *للعالما*, &c. Within the curve of the rim, a border of medallions enclosing figures holding wine-cups, &c., and also pairs of figures resembling the Madonna and Child. The central and chief device consists of a seated cross-legged figure on high-backed throne, attended by two squires, holding cup and sword (other cups sprinkled in the field) ; at the foot of the throne two lions couchant, and beneath them a two-headed eagle, closely resembling that of Beysary, between two bowmen shooting each at one of its heads.

[B. M., Henderson, 706.]

8. EWER.—*Brass inlaid with silver.* No date. [Thirteenth century.]

The decoration on the body is arranged in a series of zones on an arabesque ground.

The topmost zone consists of a band of falcons, back to back, with silver eyes, tails crossed, and heads standing out in very bold relief, so as to form a sort of parapet of knobs.

Second zone : Arabic benedictory inscription, tops of *alifs*, *lūms*, &c., terminating in chased human faces.

Third zone : Beasts of the chase.

Fourth or central zone, wider than the rest : Large arabesques enclosing twelve quasi-medallions, filled with personified signs of the zodiac combined with the seven planets, viz. (1) Mars on Aries, warrior holding decapitated human head, and riding ram ; (2) Venus on Taurus, woman (with lute) riding bull ; (3) Mercury and Gemini, two figures linked together with a staff (pen?) between them, terminating in human faces ; (4) Moon and Cancer, crab surmounted by human head in crescent formed by claws ; (5) Sun and Leo, lion surmounted by sun ; (6) [Mercury and] Virgo, woman with two ears of corn ; (7) Venus and Libra, balance held up by a woman ; (8) Mars and Scorpio, man holding two scorpions ; (9) Jupiter and Sagittarius, centaur shooting arrow down gaping mouth of dragon (formed out of his own tail) ; (10) Saturn and Capricornus, bearded man with long staff, riding goat ; (11) Saturn and Aquarius, bearded man and well-bucket ; (12) Jupiter and Pisces, two fish (Jupiter covered by handle).

Fifth zone : Beasts of the chase.

Sixth zone : Arabic benedictory inscription.

Seventh zone : Long-necked birds within borders, necks intertwined.

Eighth zone : Arabic benedictory inscription.

On the *neck* is a zone of Arabic benedictory inscription, with a fine lion sejant at either side ; a zone of birds with red copper eyes ; the ground consists of beautiful free arabesques. Up the spout and sides of handle run strings of beasts of the chase, and up the back of the handle a string of birds ; at the junction of handle with body is a seated figure, cross-legged, holding two serpents.

(B. M. Engraved in Labarte's *Handbook of the Arts of the Middle Ages*, ed. Palliser, p. 423.)

The silver inlay of this ewer is effected by undercutting the edges, and not by stippling the surface (what stipples there are belong to a later repairing), and the straight lines are inlaid by punching all along them with a small oblong-headed punch.

9. BOWL.—*Bronze inlaid with silver.* No date. [Thirteenth century.]

The decoration consists *without*, in two zones of Arabic religious inscriptions divided by key-medallions, and a double row of medallions enclosing aureoled figures playing musical instruments and drinking from cups ; *within*, a zone of medallions enclosing hunting-scenes, aureoled figures fighting with lions, carrying falcons, riding an elephant, and a Bedawy on camel, the interstices filled with key-pattern ; at the bottom, inside, a boat rowed by three men, while two others shoot wild ducks, another cuts a duck's throat, a seventh sits at the mast-head, and another dives beneath, pursued by an alligator ; three zones of Arabic religious and unmeaning inscriptions ; on rim, border of animals of the chase, elephants, and a winged centaur. Height 8 in., diam. 19 in.

[S. K. M., 2734—1856.]

The foregoing is one of the finest pieces of Mōsil work in England. The elephant and camel are specially noteworthy ;

above all, the spirited scene on the bottom of a shooting party on the water, such as is recorded in the accounts of the sports of Persian princes.

10. STAND.—*Brass inlaid with silver and gold.* No date.
[Thirteenth century.]

Nine-sided ; chased with representations of nine figures of aureoled horsemen, holding falcons, fighting with dragon, brandishing bow, spear, and other weapons ; above, nine cross-legged seated aureoled figures clashing cymbals, blowing pipe, holding candles, and putting wine-glass to lips ; the interstices filled with black bituminous enamel ; on a background of silver scroll-work ; above and below, imitation Arabic inscription (ل ل, &c.). Height $5\frac{3}{4}$ in., diam. $9\frac{1}{4}$ in.

[S. K. M., 917.—1884.]

The workmanship of the preceding is unusually delicate and intricate, and the shape is peculiar. It may have formed the base of a candlestick. The black enamel, composed really of pitch, is here well preserved, and it is probable that the majority of the inlaid works of this period were treated in a similar manner ; so that the black composition concealed most of those intervening portions of brass which the silver plates did not cover.

It is impossible to conclude this section without referring to the most famous example of figured Mōsil work in Europe, the so-called "Baptistery of St. Louis," preserved in the Louvre.* This splendid bowl, which belongs in style to the class of Mōsil work of the thirteenth century, measures five feet in cir-

* It has been fully described by M. de Longpérier, in the *Revue Archéologique* (N. S. vii. 306-9), and the article reappears in the first volume of his *Œuvres* (pp. 460-6).

cumference, and is covered inside and out with bands of figures richly inlaid with silver, so that little of the copper is visible. On the band inside are two medallions, each enclosing a prince seated cross-legged on a throne with a high pinnacled back and two lions under the feet, and holding a wine-cup, attended by two servants, one on the left of the prince bearing a sword, the other on the right holding a casket inscribed دواة ("writing-case"). On the back of the throne is the inscription "made by Ibn-ez-Zeyn," or (as it is written elsewhere on the bowl) عمل المعلم محمد ابن الزين غفر له, "Made by master Mohammad ibn-ez-Zeyn, save him!" The little cups held by the princes in the medallions are also signed with his name, as though they represented the vessels actually made in his workshop. Between the medallions are, on the one hand, six horsemen fighting with lances, bows, and maces; on the other, six huntsmen pursuing beasts and game. One carries a chitah on the crupper—one of those "leopardi qui sciunt equitare" which the mighty hunter Frederic II. loved to see engraved upon his cups.

On the exterior a frieze of figures, ten centimètres high, is broken by four medallions, each containing a prince on horse-back killing a bear, a lion, or a dragon, with lance or arrows. Between, his servants bring him arms, falcons, a slain antelope, dogs in leash, and leopards; one offers a flask and cup (inscribed with Ibn-ez-Zeyn's name); another, a plate, inscribed انا بجفيز لحمل الطعام, "I hasten to bring food." This frieze is bounded by two borders of beasts of the chase, divided by eight medallions, containing each a fleur-de-lis—probably a later European addition.

Such, in effect, is M. de Longpérier's description of this magnificent work of art, to which the engravings inserted to illustrate his article do scant justice. Some of the zones are reproduced from these engravings fig. 82. Mr. W. Burges (in Sir Digby Wyatt's *Metal Work*) says that the inlay of this

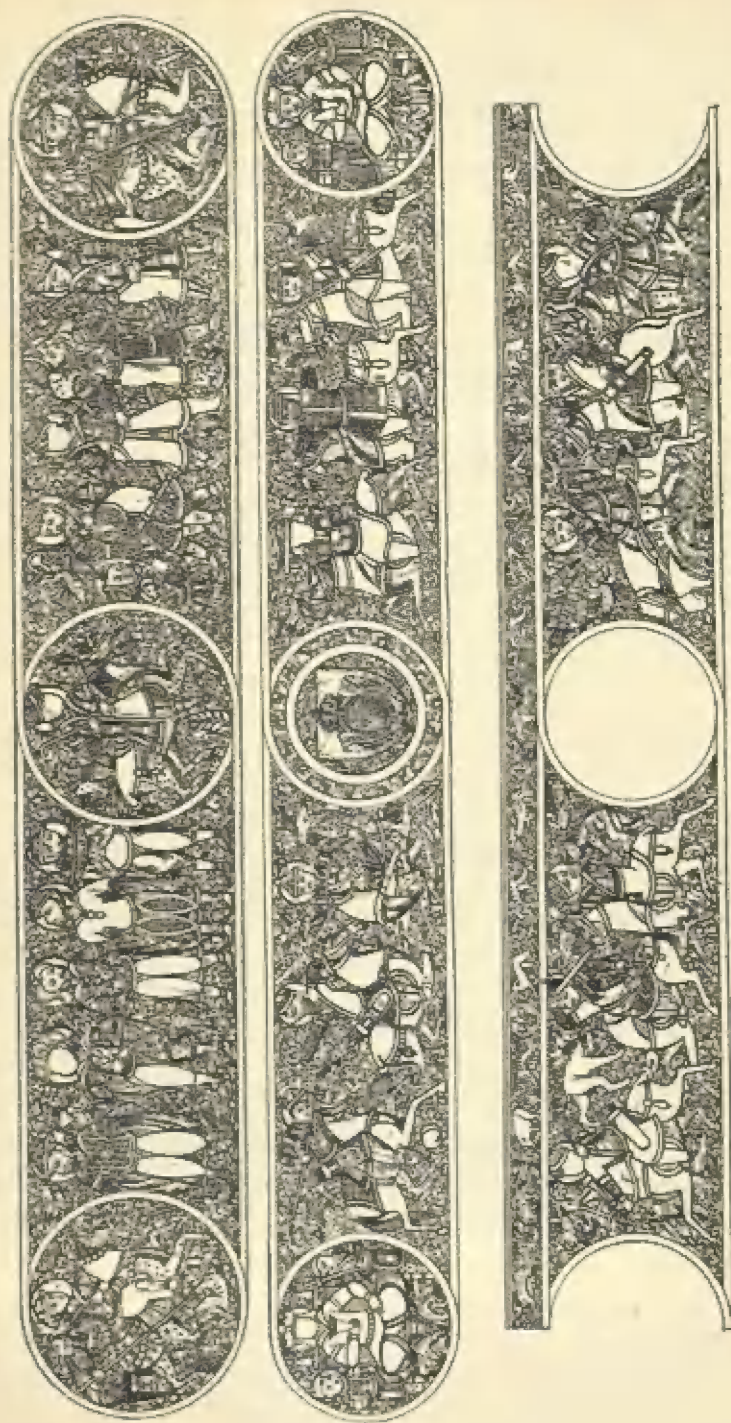


FIG. 82.—INLAID SILVER PANELS OF THE "BAPTISTRY OF ST. LOUIS."

(Louvre.)



bowl is effected by sinking the designs, especially deeply towards the edges, which are under-cut in a rebate, into which the edges of the inlaid plate are forced.

Before dismissing the Mōsil work, some reference must be made to the numerous mirrors which were made in that part, as well as elsewhere. They have been brought from Mesopotamia, Egypt, and especially from the South of Russia, where they are often found buried in the graves of Tartars. They are generally cast, with a good deal of silver in the bronze; in form they are round or square, and vary in size from two inches to a foot. Several are preserved in the British Museum, including those described by Reinaud, from the Duc de Blacas' Collection. The ornament is on the back, and generally consists of little more than benedictory inscriptions; but one has a pair of Assyrian winged monsters, resembling Kalaūn's winged kings.

II. EARLY SYRIAN WORK.

11. COFFRET.—*Brass, inlaid with silver and gold.* No date.

[Late thirteenth century?]

Oblong, with sloping lid and silver chains to support it when open. It is covered with silver plates, chased with foliage, birds, and human-headed lions; and inlaid with medallions of designs and religious or unmeaning (العابالعا) Arabic inscriptions in gold.

On the lid are eight large and small bosses. Height $5\frac{1}{2}$ in., L. $5\frac{1}{4}$ in., W. 4 in.

[S. K. M., 459.—1873.]

Other specimens of the same sort are engraved in Prisse, where one is stated to have belonged to En Nāsir ibn Kalaūn.

12. WRITING-BOX.—*Brass, inlaid with silver and copper.* With hinge and hasp. No date. [Late thirteenth century?]

Oblong, with compartments for pens, ink, sand, &c.

Along the front, sides, and back of lower part, the signs of the zodiac are represented in combination with the planets, much as on No. 8, but with copper as well as silver inlay; the ground is of closely interwoven arabesques, inlaid and chased on the surface. On the bottom are four groups of four water-fowls each, with the heads together. On the lid, three medallions filled with key-pattern; arabesque ground; and border of decorative Kūfy inscription, nearly illegible. Inside the lid is an Arabic benedictory inscription and a Kūfy inscription on the top inside, with a central panel, and arabesque ground.

[B. M., A. W. Franks, 1884.]

13. WRITING-BOX.—*Brass, inlaid with silver and a little gold.* No date. [Late thirteenth century?]

Similar to 12, but with rounded ends; seventeen figures, riding, drinking, or playing on musical instruments, on the lid and bottom, inside and out; water-fowl confronted in pairs, back to back, and also a group of six; small medallions of key-pattern inlaid with gold wire.

[B. M., Burges, 19.]

14. WRITING-BOX.—*Brass, inlaid with silver and a little gold.* No date. [Late thirteenth century.]

Similar to 12 in shape and general treatment, but the leaves of the arabesque ground are now frequently converted into birds, and there are no figures: the two birds fighting beak to beak, in chased silver inlay, occur repeatedly, and also the key-pattern

medallions in gold: Arabic benedictory inscriptions on top and round sides, and on bottom arabesques on a key-pattern ground: inside, fine rosettes of flowers and leaves like Damascus tiles, numerous key-pattern medallions in gold wire, flower-scroll borders, wild-fowl in panels of six, two Arabic benedictory inscriptions, and one circular radiating inscription, viz.:

الجناب العالی المولوی الکبری المالکی السیدی الهامی
الغیائی الذخری

"His Highness exalted, lordly, great, royal, master, valiant, *Ghiyāthy*, munificent."

[B. M., Burges, 20.]

It is dangerous to hazard conjecture as to the identity of the prince *Ghiyāth-ed-din* from whom this Mamlūk (retainer) took his epithet *Ghiyāthy*, for the name is not uncommon. It does not, however, occur among the Beny Zenky or the Bahry Mamlūks, and it is not unreasonable to suppose it to refer to either *Edh-Dhāhir* or *El-'Aziz*, son and grandson of *Saladin*, who both bore the surname, and ruled Aleppo from 1186 to 1236. A retainer of the latter might easily be living in the second half of the thirteenth century.

15. Box.—*Brass inlaid with silver and a little gold.* No date.

[Late thirteenth century?]

Oblong, curved outline. Gold inlay chiefly distributed in key-pattern medallions and stars; silver in the confronted birds &c.; two groups of four birds within eightfoils on top; on front, two birds confronted and two beasts confronted within eightfoil, four times repeated, in alternation with arabesques likewise enclosed in eightfoils; ground of key-pattern; border of beasts of the chase.

[B. M., Henderson, 677.]

The last three pieces were in all probability made by the same school of artists. They began with the Mōsil-like system of zodiacal and other figures (but in a much more finished and delicate manner), adding the characteristic mark of this group—the gold-inlaid key-pattern medallions—and then omitted the figures and introduced more of the waterfowl that afterwards became most prominent on Mamlūk work, and also added the typical Damascus rosette ornament. These boxes constitute a class by themselves, and arguing from the Damascus ornament and the (probably) Aleppo epithet, I have provisionally termed it *Syrian*. A similar writing-box in the South Kensington Museum (8993—1863) has a long series of Mamlūk titles, none of which identify its provenance.

III. MAMLUK WORK.

The rule of the Mamlūks in Egypt extended from the middle of the 13th to the beginning of the 16th century; but there are hardly any examples of their metal-work of the 13th century, and the finest and most numerous class is that of the Nāsiry Amirs, or courtiers of the Sultan En-Nāsir Mohammad, in the 14th century: this is the style which is meant when the term Mamlūk work is employed. Of the earlier century, besides the perfume-burner of Mōsil style already described bearing the name of Beysary, the chief specimen of 13th century work made in Cairo is the bronze plating of the doors of Beybars' mosque *extra muros*.

16. DOOR-PLATING OF THE MOSQUE OF BEYBARS I., A.D. 1268.

These plaques are now in the South Kensington Museum, having been acquired in 1884 from M. de St. Maurice. They consist of a central boss, bearing the crest of Beybars, a lion

passant (fig. 83), with twelve geometrically shaped plaques arranged round it, each of which contains an arabesque design in open filigree-work (fig. 84); a smaller boss surrounded by nine similar plaques; a knocker (fig. 85); and a border of open arabesque-work (fig. 86) and a portion of an Arabic inscription (الإتاكى الملكى الظاهرى) also in open work. Two other sets consist of a knocker, bosses, and geometrical plaques filled with arabesque designs in open work, arabesque borders, and a portion of a Korān inscription. The plaques form systems of 10 in these sets; of 12 and 9 in the first set. All these pieces are *cast*, not



FIGS. 83—86.—BRONZE PLAQUES FROM DOOR OF BEYBAR I.
(South Kensington Museum.)

cut, and are therefore identical each with its fellows in the same system, in contrast to the usual character of Cairene work, where we seldom find two patterns alike. The arabesques are, however, very free and flowing, and the appearance of the numerous plaques, fastened all over the door by ribbed studs, must have been highly effective. The mosque where these doors once hung was built by Sultan Beybars, in the Huseyniya quarter of Cairo, in 665-7 (A.D. 1266-8), and contains many remarkable features.

These bronze-plaque doors of Beybars are of a different character from the bronze doors of the later Mamlûks.* The mosques of Cairo present many splendid examples of this later style, which usually consists in covering the doors with large plates of thin bronze (about $\frac{1}{4}$ inch), cut out in various arabesque patterns, or cast in embossed designs, and chased on the surface, and generally distributed in the form of a central circle or oval and four corner-pieces, or spandrils, with a border round the four sides, secured by ribbed-headed nails. The door itself is of wooden planks nailed on to a frame-work behind, and strengthened by bronze bands near the top and bottom, which run through, according to Mr. Wild, and turn round at the edges, being formed into panels by the arabesque border on the front side: it turns on pivots, not hinges. Some of these doors are admirably represented in Prisse d'Avenne's *L'Art Arabe*: for example, the beautiful door of Almâs (vol. ii. plate 100), where the whole surface is covered with bronze plaques, more like the style of Beybars than is common on later mosques; that of Sultan Barkûk (pl. 96) with a central circular plaque, pointed at top and bottom, four corner-pieces, and narrow border; that of Sultan Kansûh El-Ghōry (pl. 102) arranged somewhat similarly; and that of Talâ'îb ibn Ruzeyk, as restored by Bektémir in the 14th century (pl. 95). There is a splendid bronze door to the mosque of El-Muayyad (A.H. 818-23), which was taken from the mosque of Sultan Hasan, where, however, the entrance to the tomb chamber is still closed by a magnificent gate of bronze inlaid with silver.

From the bronze doors of Beybars, the history of metal-work in Cairo leaps over four Sultans to En-Nâsir Mohammad ibn Kalaûn,

* Ibn Batûta (i. 75) tells us that the monastery attached to the mosque where Huseyn's head was buried at Cairo had doors plated with silver, and silver rings. En-Nâsir Mohammad, in 733, furnished a door for the Ka'ba at Mekka, which was made of ebony, covered with silver plates of great weight.

who reigned A.D. 1293-4, 1299—1309, and 1310-41, or (omitting the first brief rule) during most of the first half of the 14th century. En-Nāsir built two noble mosques, and the number of works in metal bearing his name and those of his courtiers is very large. Among the finest is the beautiful table preserved in the Arab Museum at Cairo.


17. TABLE (KURSY).—*Brass, inlaid with silver.* Made for the Mamlūk Sultan En-Nāsir Mohammad. Fourteenth century.

It is made of filigree brass inlaid with arabesques, flowers, water-fowl, and Arabic inscriptions in silver, and is chased all over in elaborate profusion. One of the panels, forming a folding door, through which no doubt a pan of live charcoal was introduced, to warm the tray of food which was placed upon the table, is represented in fig. 75, where the inscriptions on the top border read, عز لمولانا السلطان الملك الناصر ناصر الدنيا والدين
محمد بن السلطان الملك المنصور الشهيد قلاوون الصالحى عز
انصاره

"Glory to our lord the Sultan, the king, En-Nāsir [the Succourer or Helper], Aid of the church and state, Mohammad, son of the Sultan, the king, El-Mansūr [the victorious], the martyr [*i.e.* defunct] Kalaūn, [liegeman] of Es-Sālih [Ayyūb], be his triumphs magnified!" The inscriptions in the three other narrow borders are practically identical with the above. The large inscription in the upper panel is محيى العدل فى العالمين | ناصر الدنيا والدين "Upholder of justice in the world, Aid of the state and church;" while in the circular medallions is distributed the inscription, "Glory to our master the Sultan | El-Melik En-Nāsir Mohammad ibn | El-Melik El-Mansūr Kalaūn." * [Musée Arabe.]

* An engraving of the top of the table, showing the Arabic inscriptions in Kūfy and Naskhy, and the ornament of ducks, &c., may be seen in my *Social Life in Egypt*, p. 35.

18. Another brass and silver filigree Table (*kursy*), preserved in the same museum, and stated to have belonged to the Mâristân of Kalaûn, is represented in fig. 74. It has no inscriptions, but undoubtedly belongs to the same period as the first.

The characteristic designs of the Cairo metal-workers under En-Nâsir Mohammad may, however, best be seen in the large bowl or tank described below. As a rule, but not without exceptions, we may set down, as characteristic of 14th century Cairo work, the absence of figures (except on vessels having astrological uses), the prevalence of ducks or other birds in the ground decoration, the medallions (enclosing a sort of fess bearing the name of the Sultan,) surrounded by a rosette of flowers and leaves resembling the patterns of Damascus tiles, the shoals of fish at the bottom of bowls, the broad bands of tall bold silver-inlaid letters, the large surfaces of inlay, and the little whorl ornament  which takes the place of the key-pattern medallion already noticed.

19. LARGE AND DEEP BOWL.—*Brass, inlaid with silver.* Made for the Sultan En-Nâsir Mohammad ibn Kalaûn (A.D. 1293—1341).

Ornamented with broad bold zones of Arabic inscriptions, filled in with waterfowl and flowers and leaves (which seem to be conventionalized ducks' wings), and divided at regular intervals by medallions, enclosing titles on a fess, and enclosed in rosette of flowers and leaves.

Large inscription round the outside :—

عز لمولانا السلطان الملك ○ لناصر العامل العادي المجاهد ○
ناصر الدنيا والدين محمد بن قلاون ○

"Glory to our lord the Sultan, the king, the helper [El-Melik

En-Nāsir), ruler, leonine, fighter for the Faith, Aid of the state and church, Mohammad son of Kalaūn." The medallions enclosed in rosettes of flowers indicated by O contain, on a fess, عز لمولانا السلطان "Glory to our master the Sultan the" (*sic*).

Above and below the large inscription, on a floral ground, six little medallions contain عز لمولانا السلطان "Glory to our master the Sultan," twelve times repeated.

Scratched under rim by later hand الصبر عبادة "Patience is worship."

Large inscription inside :—

عز لمولانا السلطان الملك الناصر O العالم العامل العادي المجاهد O
 "Glory to our lord the Sultan El-Melik En-Nāsir, wise, ruler, leonine, fighter for the Faith, warden of Islam, Aid of the state and church, Mohammad son of Kalaūn, be his triumph magnified!"
 The medallions marked O are filled as on the outside: but there are no small medallions in the floral border beneath, or in the double scroll border above inscription; but the last is divided by six whorls.

The bottom is covered with a shoal of fish, in a circular spiked border.

[B. M., 51. 1. 4.]

These large inscriptions offer a good example of the method of inlaying silver plates. Each letter was scooped out and deepened towards the edges, which were slightly under-cut and very delicately serrated. As the weak hold thus obtained let the silver escape, a later workman seems to have repaired the tank, and re-inlaid it by stippling the surfaces with a triangular point and rudely serrating the edges. Very little of the silver now remains: what there is shows that the surface was delicately chased when the subject required it (*e.g.* birds' wings).

The South Kensington Museum possesses a large tray of the same Sultan, of the sort that is used to carry a meal, splendidly engraved and inlaid, as follows :—

20. TRAY.—*Brass, inlaid with gold and silver.* Made for the Sultan En-Nāsir ibn Kalaūn (A.D. 1293—1341).

The principal inscription (*a*) occupies a large zone on the upper surface, and is composed of bold Naskhy letters:—

عز لمولانا السلطان (م) لملك العالم العا (م) مل العادل العادر عز نصره (م)
 "Glory to our lord, the Sultan, the king, wise, just, ruler, be his triumph magnified!"

At (*m*) the inscription is broken by medallions containing the words الملك الناصر El-Melik El-Nāsir, on a fess; and round each medallion runs an inscription (*b*) similar to (*a*), but adding, after العادر, المجاهد المرباط المتاعز المؤيد, the whole enclosed in a belt of leaves and flowers.

An inner zone of inscription is similar to (*b*), but continued with the words المنصور سلطان الاسلام والمسلمين عز نصره, "The victorious, Sultan of Islam and the Muslims: be his triumph magnified," and divided by three similar pairs of medallions joined together by a panel of flowers and leaves. The right-hand medallion of each pair contains on a fess the words عز لمولانا السلطان (*c*), the left, on a shield, an antelope in an enclosure.

A third innermost zone of inscription is similar to *a*, but substitutes المجاهد for عز نصره

On the outer surface of the rim is the following inscription, divided at O by sets of three medallions like (*c*), joined by panels of flowers:—

O flowers O العادل العادل العادل العادل العادل العادل
 O flowers O العادر المجاهد المرباط المتاعز المؤيد المنصور ناصر الدين
 والد O fl. fl. O بين قاتل الكفرة والمشركين محيي العدل في
 العالمين والفقرا O fl. O fl. O والمساكين السلطان الملك المنصور
 ناصر الدنيا والدين O fl. O fl. O

"Glory to our lord the Sultan, El-Melik En-Nāsir," &c.

Diam. 31 in. [S. K. M. 420—1854].

21. Box.—*Brass, inlaid with silver.* Made for the Overseer Ahmad. [Fourteenth century.]

The lid is hinged and fastens with a hasp: on the top is a radiate Arabic inscription surrounding a shield (on a fess a lozenge):—

مما عمل برسم العبد الفقير الرجى الغفران من الرب المنان [١] لهتار
احمد مهتار الامير محمد بن ساطلمش الجلالى

“Of what was made by order of the humble servant, hoping for forgiveness from the benevolent Lord, the Overseer Ahmad, Overseer to the Amir Mohammad son of Sātilmish, the Gelāly.”

On the hollowed rim of the lid is a border of flower-scrolls divided by whorls, and below this a border of beasts of the chase divided by shields: on a fess, a lozenge.

On the lower part, divided by four medallions containing water-fowl, on a ground of large arabesques of early style, are the Arabic benedictory verses:

ولا برحت مدا الايام فى سعة | بانعم ومسرّات وافضالى
لا زلت يا مالكى ما دمت فى دعة | وانت من كلّ همّ خالى البالى

Cease not through all thy days to dwell at ease,
Where comforts solace thee, and pleasure charms:
While breath shall last, my Master, cherish peace;
High rest thy heart above the world's alarms.

On the bottom, a beautiful arabesque border surrounds a whorl.

[B. M., Blacas. Reinaud, ii. 422.]

The name of the Amir Mohammad ibn Sātilmish has not yet been identified; but a Mamlūk called Sātilmish is mentioned in the latter half of the thirteenth century as taking part in the court at Cairo; and the style of arabesques on the box, the character of the inscriptions, the whorls and shields, undoubtedly indicate a Cairo fabric. The title *Miḥtār*, or Overseer, was given to the officers who presided over the different departments of a princely household.

22. BOWL.—*Brass, inlaid with silver.* Made for a Courtier of En-Nāsir. [Fourteenth century.] (Fig. 87.)

Outside, whorl at bottom surrounded by sort of sixfoil, round which a lozenge-diaper ornament; ground of Damascus flowers and water-fowl; border inscription divided by six whorls enclosed in a ring of flying ducks:—

المقر الكريم العا ٥ لى المولوى الاميرى ٥ الكيمرى العالمى ٥
 العالمى العادى ٥ المجاهدى المربطى ٥ لملكى الناصرى ٥
 "His Excellency, generous, exalted, lordly, great Amir, wise, ruler, leonine, fighter for the Faith, warden of Islām [liegeman] of El-Melik En-Nāsir."

On the bottom, inside, a shoal of fish round a whorl.

[B. M., Henderson, 686.]

23. CANDLESTICK WITH THREE FEET.—*Brass, inlaid with silver.* Made for a Centurion of En-Nāsir. [Fourteenth century.]

Engraved with birds and arabesques, the interstices filled with black enamel. Round central band, inscriptions in silver inlay, recording fourteenth century Mamlūk titles, (including that of Captain over 100,) divided by three medallions enclosing birds and whorls of eight rays. Height 12 in., diam. 10½ in.

[S. K. M., 912.—1884.]

Another candlestick in the South Kensington Museum (4505—1858), is engraved in fig. 88.

24. STAND FOR TRAY.—*Brass (with an alloy of silver).* Made for a Chief Secretary. [Fourteenth century.]

Dice-box shape; engraved with Arabic inscriptions, divided by medallions containing coats of arms in floral borders; the spaces



FIG. 87.—BRASS BOWL INLAID WITH SILVER.
Fourteenth Century. (British Museum.)

filled with floral ornaments outlined with black enamel. The inscription reads :

الجناب العالی المولوی ا ○ السیفی امیر دوادار اتابک عز انصاره

"His Highness, exalted, lordly, [liegeman] of Seyf-ed-din, Chief Secretary, Atābek : be his triumphs magnified!"

Height $9\frac{1}{2}$ in., diam. $7\frac{3}{8}$ in. [S. K. M., 934.—1884.]

The floral ornaments are of the kind already described, the Damascus-like leaves and flowers ; and the medallions and floral borders form a kind of rosette very characteristic of the Nāsiry period. The coats of arms consist of a fess bearing a large goblet between two smaller ones ; above the fess is a hieroglyphic inscription $\text{Q} \text{O} \text{D} \text{E}$, denoting "lord of the Upper and Lower country"—which the Mamlūks must have constantly seen on the ancient monuments, but were undoubtedly unable to interpret—and beneath is a lozenge. The subject of heraldic bearings on Mamlūk works of art has been extensively discussed by the late Rogers Bey in a paper published in the *Bulletin de l'Institut Egyptien*. This particular coat of arms is not described by Mr. Rogers ; but several nearly resembling it belong to the Amirs of the fourteenth century. The cup, as a charge, indicates that the bearer held the post of Sāky, or cupbearer, to the Sultan or to some great noble.

25. BATH VESSEL.—*Bronze, inlaid with silver.* Made for a Courtier of En-Nāsir. [Fourteenth century.]

Round edge, Arabic inscription, divided by four shields, containing a bend between two stars :

المقر العالی المولوی المالکی ا □ العادلی العاملی العالی الا
 □ (sic) المجاهدی المراطی المتاعزی اله □ لکی العادلی
 المالکی الناصری □

"His Excellence, exalted, lordly, royal, just, worker, wise,

fighting for the Faith, warden of Islām, powerful, royal, just, [liegeman] of El-Melik En-Nāsir."

[B. M., Burges, 22.]

The intention of the next bowl is certainly magical: the planets are to be used astrologically, to secure auspicious results. The bowl would be filled with water, which became imbued with the mysterious influences of the planets, and then the water would be drunk off, or sprinkled on the person. These cups were often made at Mekka, in view of the Ka'ba, which is sometimes represented: so much is stated on a cup in the Vatican.

26. BOWL OR CUP.—*Brass, inlaid with silver.* Made for a Courtier of En-Nāsir. [Fourteenth century.]

Outside, on bottom, seated figures of the planets: the moon, a crowned human figure, holding a crescent in two uplifted hands; Mars, helmeted and holding sword and bleeding head; Mercury, holding a carpenter's square; Jupiter, seated judge-like, between two fish; Venus with pear-shaped lute and wine-cup; Saturn with raised staff and purse; the sun should have occupied the centre, but is worn off. Ground of arabesques. An inscription round the side, divided by three seated aureoled figures holding wine-cups, records usual Mamlūk titles of El-Nāsir's court.

Inside, at bottom, a shoal of fish, arranged in form of whorl.

[B. M., Blacas. Reinaud, ii. 359, ff., and pl. vii.]

27. TRAY.—*Brass inlaid with silver.* Made for Sultan Sha'bān, who reigned A.H. 746-7 (A.D. 1345-6).

Ornamented somewhat in the Nāsiry style, with rosettes and geometrical designs, on a ground of bold and rather coarse arabesques.



FIG. 88.—BRASS CANDLESTICK INLAID WITH SILVER.
Fourteenth Century. (South Kensington Museum.)

A. Large ~~zone~~ of inscription :

عز لمولانا السلطان الملك الكامل العالم العامل العادل
 العاذر المجاهد سيف الدنيا والدين شعبان عز نصره
 "Glory to our lord the Sultan, the king, perfect, wise, ruler,
 just, lenient, fighter for the Faith, sword of the state and church,
 Sha'bān : be his triumph magnified !"

B. At O, medallions : — الكامل الملك surrounded by a circular inscription, C, similar to that above, but omitting العامل العادل and عز نصره ; the whole enclosed in border of boldly drawn flowers and leaves.

In the centre of the tray is a sixfoil enclosed in ring of inscription (same as C) within double trefoil, outside which a ring of inscription similar to A (omitting عز نصره), divided into three parts by panels of flowers between whorls.

The rim is covered with floral borders and whorls.

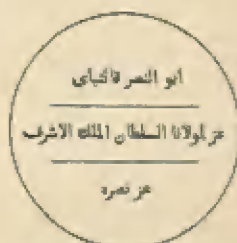
[B. M., Blacas. Reinaud ii. 439].

A beautiful writing-box, with the name of the same Sultan, and decorated with ducks, whorls, and key-pattern, is engraved in Prisse.

Reinaud (ii. 441, n.) describes a tray, nearly four feet in diameter, which he saw in Paris, and which bore the name of Farag son of Barkūk, second of the Burgy or Circassian Mamlūks, who reigned (with a year's interruption) from A.H. 801 to 815 (A.D. 1398—1412). Unfortunately he does not tell us the style of decoration, the metal or metals, or other details, nor does he mention what has become of the tray. The inscription in the midst ran : عز لمولانا السلطان الملك الناصر فرج بن برقوق ; عز نصره ; while a larger inscription included a long string of titles. These long and sounding titles are often clearly regulated by the space at the artist's command, and even the words themselves are apparently varied to suit the taste. It is probable that العادل, العاذر, &c., are merely fanciful alterations of الغازي.

Fig. 89 represents the back of a very beautiful brass bowl of the Mamlūk Sultan Kāit-Bey (A.D. 1468-96), which is preserved in the South Kensington Museum (no. 1325—1856). It is specially noteworthy for the back being ornamented with a *repoussé* arabesque design of great beauty, covered with delicate chasing. The inscription on the side, inlaid with silver, runs : عز لمولانا السلطان الملك العادل المجاهد المرباط ا ○ لمؤيد المنصور سلطان الاسلام ○ والمسلمين الملك الاشرف ابو النصر قاتباي عز نصره ○

" Glory to our master the Sultan, the king, just, fighter for the Faith, warden of Islām, God-aided, victorious, Sultan of Islām and the Muslims, the most noble king [El-Melik El-Ashraf], Father of Victory, Kāit Bey : be his triumph magnified." At ○ are four medallions, characteristic of Kāit Bey's monuments and all his works ; they contain his name and style, as below :—



Among the purposes to which metal-work was applied was the manufacture of large chandeliers or lanterns for mosques. Some of these are still hanging before the niches but most of them have been taken away. Coste illustrates a bronze lamp of Sultan Hasan (pl. 23), and two are seen hanging in his representation of that mosque (pl. 25), besides the usual small plain glass lamps: but Coste was quite capable of inserting such details for the sake of artistic effect, and their presence in his drawing is hardly a proof that they really existed. Coste also gives a large lamp to the mosque of Kāit-Bey ; and in Prisse there is an illustration



FIG. 89.—BRASS BOWL OF EKIT BEY.
Fifteenth Century. (South Kensington Museum.)



(reproduced in fig. 76) of a silver lamp of Beybars II. of the shape of the usual enamelled glass lamps, but made of filigree work, hung by fine metal straps, which, however, are imperfectly rendered in the woodcut. An engraving of an early undated metal lamp of the same form, which comes from Jerusalem, and is now in the Louvre, is reproduced (fig. 90) from M. de Longpérier's *Œuvres*. Another form is that of a chandelier, of a conical shape, surrounded by numerous little glass globes to hold oil and wicks. An example of this kind (from the mosque of 'Abd-el-Basit, and now in the Arab Museum at Cairo), made of filigree iron with a bright copper band, is shown in fig. 77, and fig. 78 represents a bronze tray (intended to be suspended beneath a chandelier), covered with chasing, and bearing the name and titles of the last of the Mamlūk Sultans, Kansūh El-Ghōry (A.D. 1501—1516).

The art of metal-working survives in Cairo, as has been said, to the present day. The finer style of bronze door was made in perfection so late as last century, as may be seen from M. Prisse's engraving of the door of 'Abd-er-Rahmān Kikhya (A.D. 1760), which is as delicately wrought as any earlier example. In the present day the coppersmiths of Cairo make trays and ewers and other common utensils decorated with considerable skill in the style of the Mamlūk work, and sometimes with much elaboration of ornament, including inlay of gold wire.

The results of the foregoing examination of the history of Saracenic metal-work may be roughly summarized in the following genealogical tree :—

MÖSIL WORK.

[Descended from the Assyrian metal-workers, and probably existing in very early times and in continuous development, but represented in collections not earlier than the thirteenth century, and apparently ceasing to produce the best work in the same or the fourteenth century.]

FĀTIMY WORK.

[Probably the offspring of Mösil, but at a very early period, perhaps ninth or tenth century. The art rests on historical evidence; but there is a lack of examples in metal-work in the collections.]

EARLY SYRIAN WORK.

[Containing Mösil elements with certain local characteristics, probably peculiar to a Damascus or Aleppo school. Examples belong probably to late thirteenth century.]

SICILIAN WORK.

MAMLŪK WORK.

[Containing Fātimy (or Mösil) and Syrian characteristics. Numerous examples, chiefly of the fourteenth century.]

SARACENIC WORK
OF VENICE.

[Derived from Syrian and Mamlūk schools. Examples chiefly from the early sixteenth century.]

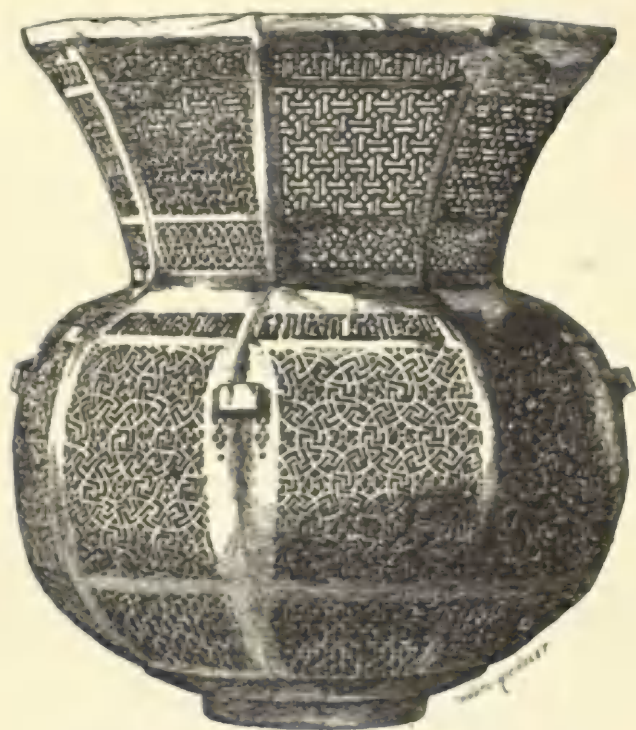


FIG. 60.—LAMP FROM JERUSALEM.
[Louvre.]

2. Goldsmith's work and Jewellery.

The Prophet Mohammad entertained a religious dislike to the luxury of gold ornament, and cautioned the women of Arabia against the use of tinkling anklets. Nature, however, was occasionally too strong for the Prophet, and although the mass of the male Muslims observe a strict sobriety in their dress, weave cotton with their silk, and prefer silver to gold for their sole ornament, the signet ring, there are always some whose passion for display overcomes the scruples of conscience; and the women, of course, cannot exist without a little jewellery. We read in the annals of Egypt of extraordinary quantities of precious stones preserved in the treasuries of princesses and khalifs. 'Abda, the daughter of the Fātimy Khalif El-Mu'izz, left at her death five bushels of emeralds and a prodigious amount of rubies and precious stones of all sorts. The Khalif El-Mustansir, this lady's nephew, possessed quantities of emeralds, pearl necklaces, gold and silver and amber rings, caskets set with jewels, figures of birds and animals adorned with precious stones, a table of sardonyx, and a jewelled turban. As a rule, however, we read more of large objects set with jewels than of small ornaments of attire, and this is explained by the fact that jewellery is principally employed by women, and therefore cannot be described in detail by Mohammadan historians, who are bound in delicacy to ignore the fair sex. Thus the seclusion of ladies in the East makes it difficult to trace the history of Saracenic jewellery, and the difficulty becomes insuperable when it is discovered that no specimens of the mediaeval jewellery of the Egyptian ladies have come down to us with a certain date.

In the absence of dated examples of mediaeval Egyptian jewellery, we are forced to work backwards from the existing productions of the jeweller's market at Cairo, and endeavour to

deduce the probable character of the earlier work. There can be little doubt that many of the ornaments now manufactured in Cairo represent ancient patterns, which have been handed from father to son in the goldsmiths' traditions for several centuries. The ordinary bracelet, composed of two plain bands enclosing a double or single twisted band is certainly an old design, and has worn the same shape and shown the same character of ornament for many generations. So, no doubt, have the anklets with square heads cut in facets. A description of the ornaments now made at Cairo—which is all that is attainable—may therefore not improbably represent the same general character of jewellery as that worn by the famous Queen Sheger-ed-durr, "Tree of Pearls," who repulsed St. Louis with her gallant Mamlûk troops.

The modern jewellery of Cairo has been so exhaustively described and illustrated by Mr. Lane, in an Appendix to his *Modern Egyptians*, that it is only necessary to summarize his account and refer to his engravings. A Cairo lady's ornaments consist in various additions to her head-dress and hair, in ear-rings, necklace, bracelets, anklets, and amulets. The head-dress is composed of a tarbûsh or fez, round which is wound a kerchief (*rabta*). To the crown of the tarbûsh is sewn the boss-like ornament called a *kurs*, about five inches in diameter, and ornamented with diamonds set in gold filigree-work. In the present day the diamonds and gold are alike of poor quality, and a good *kurs* is not worth more than £150. Even the wives of tradesmen, who are usually devoted to diamonds, manage to buy some sort of *kurs*, though it is a heavy, uncomfortable ornament, and produces headache when put on, and also when taken off, so that many ladies, when once their heads are hardened to its weight, wear it night and day. A common kind of *kurs* is made of a thin gold plate, embossed with a pattern, and having a false emerald set in the middle.

Attached to the kerchief, over the forehead, is worn the *kursa*, a band of diamonds, emeralds, or rubies, set in gold, generally with pendants, about seven inches long. On either side of the

kerchief hang festoons of pearls, connected together by a pierced emerald, and fastened at the front to the *kursa*, and at the other end to the back of the kerchief, or to the ear-ring. Sometimes a sprig (*risha*) or crescent (*hilāl*) of diamonds set in gold or silver is worn, instead of the *kursa* and pearls, on the front or side of the kerchief; and another favourite ornament is the *kamara*, or pear-shaped gold plate, embossed with Arabic letters or a pattern, and having flat gold pendants hanging beneath. There are several varieties of this ornament, in the shape of a *sakīya*, or water-wheel, a comb, &c., with distinctive names, the most curious of which is *ʿūd-es-Salīb*, "Wood of the Cross," which is clearly of Coptic origin.

The ear-rings (*halak*) are not remarkable. They consist of diamonds, pearls, emeralds, rubies, &c., set in gold, with sometimes a sprig of floral filigree-work above the drop. The necklace (*ikd*) is seen in great variety, but with this peculiarity, that it does not completely encircle the neck, being but ten inches long; the connecting piece of string is covered by the hair, which is generally ornamented with strings of gold ornaments and coins. There is usually a bead or link larger than the rest in the middle, or also at fixed intervals. Pearls strung, diamonds set in gold, and hollow gold beads, form the usual links of the necklace.

Cairene jewellers do not cut their diamonds and emeralds in facets, as this would induce a belief that they were false; but they commonly pierce the emeralds. Both customs, of course, destroy the beauty of the jewels.

More characteristic than the necklaces are the bracelets (*asāwir*) and anklets (*khulūkāl*), which are commonly of solid silver, or even gold. Simple twist for gold, and a twist set in plain bands for silver, are the most usual patterns of bracelets, and are doubtless of high antiquity. The anklets are heavy, and clank together as the lady walks, so that the poet says:

"The clink of thine anklets has bereft me of reason."

The amulet (*higâb*) is a little silver or gold box, embossed and adorned with pendants, containing a chapter from the Korân or



FIG. 91.—ARMS FOR LION HUNTING.

other charm, covered with waxed cloth, and is suspended at the right side above the girdle by a cord passing over the left shoulder.

There is another branch of metal-work of which nothing has

been said : we know almost nothing of Mamlūk armour ; and although there is undoubtedly a " Market of Arms " in Cairo which once plied a busy trade, it is doubtful whether their work did not chiefly consist in fitting and adapting the weapons and armour of Persia and the Indies. Two helmets in the Tower of London have indeed an Egyptian look, and I should be inclined to ascribe them to Cairo workmen of the period of Kalaūn (end of the thirteenth century). These are, however, quite exceptional ; and most of the arms attributed to Egypt are undoubtedly Syrian or Persian. It must not be forgotten that, to the Mamlūks, Damascus was almost as much their capital as Cairo ; and while Damascus blades were to be had there was little inducement for the establishment of an Egyptian school of armourers. The list of Beybars' presents (p. 28) includes Damascus weapons, and pikes tempered by the Arabs, but no Cairo armour is mentioned.

CHAPTER VIII.

GLASS.

It is interesting to remark that the Saracens, while they had to begin with no art of their own, and learned all their aesthetic training from their foreign subjects, yet contrived to introduce some element of distinctive originality into almost every branch of artistic work. Thus the carved panels of the Cairo pulpits are a genus by themselves; only in Cairo can such work be seen. The metal-work of Mesopotamia, Damascus, and Cairo, is wholly unlike any other metal-work in the world, except that which was avowedly an imitation of it. It is not merely that the designs are varied, or new shapes introduced; the whole character of the work is distinct from any other style. The chased inlay of silver in the metal-work, and the self-contained arabesques and geometrical panelling of doors, ceilings, and stone-work, are features which we may seek in vain to match in Europe.

So is it with their glass; it is absolutely unique in character. Without prejudging the question whether some of the mosque lamps were imitated in Italy or not, at least no one will dispute that they form a distinct class by themselves, and that no other glass resembles them in the shape, the general style, or the details of the ornament. Nor do the stained glass windows of the mosques and houses of Cairo offer any analogy to the windows of our cathedrals, or any other windows at all. In glass, as in most other artistic industries, the differentiating genius of the Saracen artist displays itself in a special character persistently maintained through many centuries.

The oldest glass in the world belongs to Egypt. The dull

green and opaque blue glass of the Pharaohs is well known, and there can be little doubt that the art was not suffered to die out under the Greek and Roman governors, though examples of these periods are not numerous. The Arab and other Mohammadan rulers of this province of the Muslim empire encouraged the manufacture of glass, at least in the insignificant form of small weights for testing the accuracy of coins. The British Museum possesses a large collection of these glass weights, bearing inscriptions which assign them to definite dates. Some have the names of the early Egyptian governors under the Damascus and Baghdād Khalifs, of the eighth and ninth centuries, but most of them present the names of the Fātimy Khalifs of the tenth and especially of the eleventh century, more rarely the twelfth. These coin weights prove at least that the making of glass had not become a lost art in Egypt. We read in the life of St. Odilo, bishop of Fulda, of a *vas pretiosissimum vitreum Alexandrini generis*, which was on the table of the Emperor Henry in the first half of the eleventh century. There is a vase in the treasury of St. Mark's, at Venice, of nearly opaque turquoise paste, inscribed with Arabic characters, which may probably be of the tenth century. "The bowl is five-sided, and on each side is the rude figure of a hare. These figures, as well as the inscription, are in low relief, and were probably cut with the wheel. The setting is in filigree, with stones and ornaments of cloisonné enamels."* Cups of rock crystal of the same century are in existence and are frequently mentioned by the Arab historians, who even describe thrones and other large objects made of this mineral, which offers some analogy to glass in the process of cutting on the wheel, and which must have induced imitations in the cheaper substance.

Most of the existing glass-work of Egypt, however, belongs to the fourteenth century, and consists of lamps intended to be suspended in the mosques of Cairo. "All show that the

* A. Nesbitt, *Descriptive Catalogue of the Glass Vessels in the South Kensington Museum*, lxiv., &c.

makers were tolerably expert glass-blowers, and could produce vessels of considerable size; but the glass is of bad colour and full of bubbles and imperfections. The makers had learnt, probably from the Byzantines, the art of gilding and enamelling glass, and made much use of it. Inscriptions in large characters are favourite ornaments; figures of birds, animals, sphinxes, and other monsters, are found. The outlines are generally put on in red enamel, the spaces between being often gilt. The enamels are used sometimes as grounds and sometimes for the ornaments; the usual colours are blue, green, yellow, red, pale red, and white.*

There is every reason to believe that these mosque lamps were made at Cairo, or at all events that the best and oldest specimens were made there,† though the coarser and more modern sort has been attributed to imitators at Murano (Venice), who are believed to have worked for the Mamlūk Sultans. It is true that Damascus and Tyre had a greater name for glass-working; Nāsir-i-Khusrau, remarks that Tyre exported glass vessels worked on the wheel; William of Tyre writes to the same effect; and Benjamin of Tudela, in the twelfth century, speaks of ten glass-manufacturers at Antioch, and four hundred Jews at Tyre (Sūr) "shipowners and manufacturers of the celebrated Tyrian glass." In the Royal Inventories of France are notices of several glass vessels, among the possessions of Charles V., in 1380, described as "of the Damascus style," among others *une lampe de verre outrée en façon de Damas sans aucun garnison*. It was, however, the custom among our mediæval chroniclers to regard Damascus as the centre of Saracenic art, and to call everything Oriental *à la façon de Damas*, and the term must not be pressed too far. Some lamps may, indeed, be the product of the glass-workers of Tyre or Damascus; and one in the South Kensington Museum is stated to have come from a mosque

* A. Nesbitt, *Descriptive Catalogue of the Glass Vessels in the South Kensington Museum*, lxiv., &c.

† They were called *Kandīl Kalaūny*, "Kalaūn's lamp."

which seems to be near Damascus, and another believed to be from Damascus is in the British Museum. Most of the Cairo lamps, however, were doubtless made in the city where they were destined to hang, or at the not far distant Mansûra, famous for its glass-works. It must always be remembered that the probability of fragile objects, such as glass and pottery, being made in the immediate neighbourhood of their destination is very strong, in the absence of distinct evidence of importation. We know that there were glass-works at Cairo. Nâsir-i-Khusrau* states that a transparent glass of great purity was, in his time, made at Mîsr, by which he means Fustât, or Old Cairo; and if he had not said this, the numerous fragments which are constantly picked up on the mounds of rubbish which lie between Cairo and the site of Fustât would be proof enough. It is curious, however, that lamps should be almost the only objects of glass that seem to have been made at Cairo. It is recorded that the Mamlûks used glass drinking-vessels, and so much might be inferred from the representation of cups on their metal-work, which are plainly intended for glass or horn vessels. Nevertheless, there is a complete absence of mediæval glass cups, or other vessels of undoubted Egyptian manufacture; and the only glass objects besides the lamps are a few bottles, decorated with enamel like the lamps, but in more delicate lines, chiefly of red and gold; and the coin weights, to which we have already referred.

Of the enamelled glass mosque lamps there are five examples of the finest kind at the British Museum, three equally superb specimens belong to the South Kensington Museum, besides four others exhibited there on loan by the Khedive. A few are to be found in private collections, of which that of M. Charles Schefer, at Paris, is among the most remarkable; Mr. Magniac has a lamp of Sultan Hasan, and Linant Pasha had others of the Amirs Sheykhû and Almâs. So few now come into the market that the

* *Sefer Nameh*, ed. C. Schefer, 152.

price of such examples as are offered for sale is absurd. Very few of these lamps are now seen hanging in their proper places in the sanctuary of the mosques; I only noticed two or three in all the mosques of Cairo in 1883. This is partly due to the risk of their being carried off by enterprising collectors, to whom the guardians of the mosques, who have long known the market value of their treasures, are not indisposed to sell them for an adequate bribe; and partly to the circumstance that the Commission for the Preservation of the Monuments of Cairo, alive to the dangers to which these magnificent objects were exposed, by the cupidity of travellers and the venality of natives, instituted a rigorous search and removed all the lamps they could find to the safety of the Museum of Arab Art. Here, when I examined the collection in 1883, were about eighty glass lamps, chiefly derived from the mosques of Sultan Hasan, Barkūk, and Kāit Bey. As there were several lamps which were precise duplicates of others in the collection, I suggested to the Khedive that four of these duplicates should be sent on loan to South Kensington, and his Highness readily gave the necessary authorisation.* The following description of these four lamps will show the general character of this branch of Saracenic glass-work.

The first lamp (Arab Museum, No. 24) bears the name and titles of Sultan Hasan, who reigned from 1347 to 1361, with brief intervals of deposition. It is ornamented with Arabic inscriptions, medallions, and other decorations, in enamelled colours, and had six loops for suspension, one of which is broken off, leaving a small hole. The colours of the enamel are chiefly cobalt and red, with a touch here and there of pale green and white. The glass is thick and muddy, with numerous striae, as is the case with all Saracenic lamps. The decoration is arranged

* An engraving of one of them was published in the *Art Journal*, and afterwards in my *Social Life in Egypt*, 98.

in a series of five bands, the position of which is indicated in the accompanying skeleton outline :—

A, on the neck, interrupted by three medallions, *a, a, a*; *B*, at the junction of the neck and body of the lamp; *C*, surrounding the body and containing the main inscription, interrupted by the glass loops for attaching the silver chains that attached the lamp to the beams or ceiling of the mosque; *D*, on the lower curve of the body; and *E*, on the foot. This division is common to most of the lamps with which I am acquainted, but the ornament of course varies greatly in different examples.

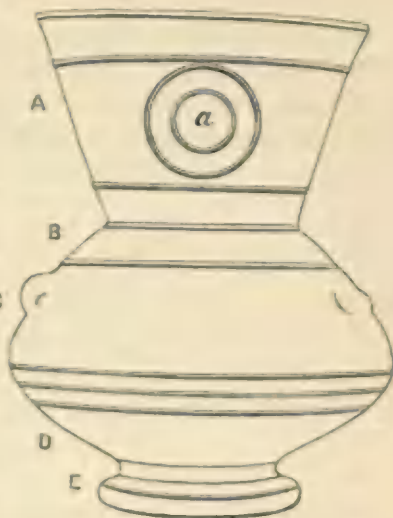


FIG. 99.

DIAGRAM OF GLASS LAMP.

The inscriptions on the five bands are as follows :—

A. (a) الله نور السموات والارض (a) مثل نوره كمشكاة فيها (a)
مصباح المصباح

“God is the Light of the heavens and the earth; His light is as a niche in which is a lamp, the lamp:” here the inscription breaks off, it should continue في زجاجة الزجاجاة كأنها كوكب دري “in a glass, the glass as it were a glittering star.”—*Korān*, xxiv. 35. The Arabic letters are in cobalt, the shading lines and ornaments, which are very delicately traced, are in red.

a, a, a. Three medallions, each bearing, on a fess indicated in

outline by thin red lines, the inscription thrice repeated: عز لمولانا السلطان الملك "Glory to our lord the Sultan the king," written in thin red lines.

B. Six fleurs-de-lis, in green and red, with red line ornament between.

C. عز لمولانا (loop) السلطان (L) الملك (L) ا لناصر ناصر (L) ا لدنيا والدين (L) حسن بن محمد عز نصره (L) ا

"Glory to our lord the Sultan the king, the helper [En Nāsir], Aid of the state and church, Hasan son of Mohammad: be his triumph magnified!" These words are formed by the glass being left plain in the midst of a ground of cobalt enamel. In earlier examples the plain portions would have been gilt.

D. Three medallions similar to *a*, *a*, *a*, but the inscriptions slightly imperfect, divided by floral ornaments in red, green, and blue.

E. Ornament in fine red outline, within blue border.

The second lamp (Arab Museum, No. 40) is similar to this in the inscriptions, the arrangement, and the colours, and differs only in substituting for the fleurs-de-lis of band *B*, six ornaments in blue, divided by red outline tracings.

The third lamp (Arab Museum, No. 47), which has lost its foot, has much less inscriptional ornament, and more floral decoration. Band *A* has, instead of the Arabic inscription, arabesque scroll-work in blue, divided by medallions similar to those (*a*, *a*, *a*) of the first lamp, and bearing the same inscription. *B* is decorated with three red and three green circular splashes, arranged alternately: these daubs are very common on lamps of this period. *C* has no inscription, but a conventional floral design repeated six times with slight variations, and divided by the six loops for suspension. *D* has three medallions like *a*, *a*, *a*, with the same inscription, divided by red outline ornamentation enclosed in blue border within outer border of red. *E* is broken

off. The inscriptions, it will be observed, do not give the name of any Sultan, but the lamp is stated to have been taken, like the other two, from the mosque of Hasan.

The fourth of the Khedive's lamps (Arab Museum, No. 11) belonged to the mosque of Sultan Barkūk, (in the Coppersmiths' Market at Cairo,) who ruled in the last two decades of the fourteenth century. The inscriptions and ornament are arranged in much the same manner as on the first lamp of Sultan Hasan. Band *A* presents the same inscription as that lamp, but perfect to the words **كوكب دري**, "glittering star." The medallions *a, a, a*, however, contain the following inscription thus arranged, written in fine red lines within a blue border, outside which is another border of fine red line ornamentation :—

<u>الظاهر</u>	the Illustrious
<u>عز لمولانا السلطان</u>	Glory to our lord the Sultan
الملك	the King

B is decorated with six splashes of pale green and red alternately, as on the third lamp.

C has the inscription—

عز لمولانا (loop) السلطان (ل.) الملك (ل.) الظا (ل.) هر ابو سعيد (ل.)
انصره الله (ل.)

"Glory to our lord the Sultan, the king, the Illustrious [Edh-Dhāhīr] Abu-Sa'īd, whom God assist." The letters are in plain glass, defined by the blue ground, as on the first lamp.

D. Three fleurs-de-lis and three double fleurs-de-lis arranged alternately in blue borders; the single fleur-de-lis also enclosed in outer red border as on the first lamp. On the foot, *E*, are coarse flowers in red and greenish white in blue scroll borders.

These are good examples of the most ordinary type of Saracenic glass lamp, with the usual mode of decoration. The three other

lamps in the South Kensington Museum, purchased in 1860, 1869, and 1875, are all rather exceptional in their inscriptions and ornament, though these are arranged in the same manner as in the Khedive's lamps. They are more choice, and the small one, of Kāfūr Es-Sālihy, from its unusually small size, and from its probably early date, is the gem of the collection.

Glass lamp of Kāfūr Es-Sālihy*, probably of the thirteenth century, enamelled in colours and gilt, the latter unusually well-preserved. Height, 10½ in. [S. K. M., 6820.—1860.]

"The ornament appears to have been traced in fine lines of red enamel, and the spaces between the lines filled in some cases with coloured enamels, in others with gilding. The whole work is carelessly executed, but very effective." On the neck is a broad band on which is an inscription in blue divided into three parts by three medallions, the centres of which are occupied by a white sixfoil flower on a red ground.

This inscription (*A*) reads—

مما عمل برسر الجناح ○ العالی ○ مولوی البکی

"Of what was made by order of his Highness the exalted, the Lord, the Bey."

On the body of the lamp (*C*), divided by three loops for suspension, is the following inscription, originally gilt on a blue ground, in continuation of *A* :—

كافور الرومي الحر (ل) يدي الملكى الـ (ل) لصالحى
عز انصاره (ل)

'Kāfūr Er-Rūmy, El-Haridy, [liegeman] of El-Melik Es-Sālih : be his triumphs magnified !'

* The descriptions of this and the two following lamps are taken partly from Mr. Neshitt's *Catalogue of Glass in the South Kensington Museum*, to which I contributed the interpretation of the Arabic inscriptions. I have, however, after an interval of ten years, made a second examination of the lamps, which has resulted in some important corrections of my earlier readings of the inscriptions, and I have also amplified Mr. Neshitt's descriptions.



FIG. 93.—GLASS LAMP OF AKBUGHA.
Fourteenth Century. (South Kensington Museum.)

On the under-side of the body the devices in medallions are repeated, separated by floral ornament, chiefly gilt on a blue ground; on the foot are three twelve-foiled medallions in blue, in which are arabesques in blue, white, yellow, green, and red, on a gilt ground.

Glass lamp of the Mamlūk Amīr Ākbughā, fourteenth century, enamelled with circular disks and medallions in white, red, and blue, with three suspending chains of silver. Height, 13 in. [S. K. M., 1056.—1869.] Fig. 93.

"This very fine specimen resembles the preceding very closely as regards the character both of the glass and of the ornamentation." On the neck, three medallions divide an inscription in blue enamel:—

فِي بُيُوتِ اِذْنِ اللّٰهِ اِنْ تَرَفَعَ وَيَذْكُرُ فِيْهَا اِسْمُهُ يَسْبَحُ لَهُ
فِيْهَا بِالْغَدُوِّ

"In the houses which God hath permitted to be raised for His name to be commemorated therein, men celebrate his praises morning" [and evening].—*Korān*, xxiv. 36.

In the centre of the medallions is a device: on a fess gules, a lozenge argent; the ground of the medallion is also white.

"On the upper part of the body are eleven sixfoil medallions formed by a blue line, the grounds within which were probably gilt. On these are lines very carelessly sketched in red, some of which show some resemblance to the outlines of birds." There were six loops for suspension, one of which is broken, dividing the inscription *C*, which is in blue characters with red edges on a gilt ground:—

مِمَّا عَمِلَ بِرِسْمِ الْجَنَابِ (ل.) الْعَالِي الْمَوْلَى (ل.) الْإِمْبَرِي الْكَبِيرِ
(ل.) سَيْفُ الدِّينِ . . . (ل.) أَقْبَا عَبْدِ الْوَاحِدِ (ل.) الْمَلِكِي النَّاصِرِي (ل.)

"Of what was made by order of his Highness, exalted, Lord, the Great Amīr, Scyf-ed-din Alfī, 'Abd-El-Wāhid Ākbughā, [liegeman] of El-Melik En-Nāsir."

On the under part of the body the medallions with devices are repeated; between them are spaces filled with arabesque ornament in white, red, green, yellow, and blue, on a gilt ground.

Ākbughā was a well-known Mamlūk of the great Sultan En-Nāsir Mohammad ibn Kalaūn. He died in 1343.

Glass lamp of Kahlis, a Mamlūk of El-Melik En-Nāsir, fourteenth century; described, but probably erroneously, as having been brought from the mosque "Devi Saidenaya" at Cairo, which is not known, though a convent of a similar name exists near Damascus. Height, 11½ in. [S. K. M., 580.—1875.]

This is rather better and more carefully made than the others, and the enamel is in excellent preservation. The inscription on the neck, in gold on a blue ground, is divided by three medallions; the centre of each shows on a red ground a gold fess, on which is a scimitar in black with white mountings.

أَتَمَّا يَعْمُرُ مَسَاجِدَ اللَّهِ ○ مِنْ آمَنَ بِاللَّهِ وَالْيَوْمِ الْآخِرِ ○
واقام الصلاة ○

"He only shall visit the mosques of God who believeth in God and the Last Day, and is instant in prayer."—*Korān*, ix. 18.

On the body are six loops for suspension, dividing an inscription in blue on a gold ground:—

هذا ما اوقفه (loop) العبد الفقير (l.) الى الله تعالى
الر (l.) احي غفور اله الكر (l.) ير قحليمر الملكي (l.) الناصري (l.)
"This is what was dedicated by the humble servant of God Almighty, hoping for the forgiveness of God the generous, Kahlis, [liegeman] of El-Melik En-Nāsir."

On the lower part of the body the medallions are repeated, the spaces between are filled with arabesque ornament, showing blue enamel on a gold ground, lines of red on gold, and three small ornaments in white, blue, red, and green enamel.

Of the lamps in the British Museum, the following are the most interesting:—

Glass lamp of Sheykhū, a Mamlūk of El-Melik En-Nāsir, four-

teenth century. The inscriptions run round the neck (*A*) and the body (*C*), and (as usual) are formed of blue enamel on a plain glass ground in (*A*), and in plain glass (outlined in red) on a blue enamel ground in (*C*): the plain glass was probably gilt when new. The neck inscription contains the ordinary *Korān* verse, "God is the light of the heavens (*s*) and the earth : his light is as (*s*) a niche in which is a lamp (*s*)" : here it breaks off.

At the points marked (*s*) is an armorial medallion : per fess, gules and sable, on a fess or, a cup gules ; within a belt of delicate red tracery.

The body inscription (*C*), divided by six loops, runs :—

برسر المقر الا (ل) شرف العالی (ل) المولوی (ل) المخدومی (ل)
السیفی سیجو (ل) الناصری عز الله نصره (ل)

"By order of his excellency, the most noble, the exalted, the lord, the master, Seyf-ed-din Sheykhū, [the liegeman] of En-Nāsir, God magnify his triumph !"

On the lower curve of the body (*D*) are three armorial medallions, as on (*A*), but divided by three medallions of arabesques, drawn in delicate red outline on a blue enamel ground, within a belt of red tracery.

Glass lamp of Tukuzdemir, Councillor of En-Nāsir, fourteenth century.

On *A*, the same inscription as on the preceding lamp, breaking off at the same point ; but divided by three shields, pear-shaped : gules, in chief an eagle displayed or, in base a cup of the last.

On *C* : مما عمل برسر المولوی الامیری السیفی طقزدمر
امیرمجلس الملکی الناصری البای

"Of what was made by order of the lord, the Amīr, Seyf-ed-din Tukuzdemir, Sitting Councillor of El-Melik En-Nāsir, the Bey."

On *D*, three shields as on *A*, alternating with beautiful arabesques in red, white, blue, and yellow.

On *E*, العالم "the wise," repeated all round.

The border ornament consists chiefly of fine red tracery.

As before, the upper inscription is blue on gold, the lower gold (outlined with red) on blue: but in this lamp the gold is exceptionally well-preserved. The "Sitting Councillor," *Amir Meglis*, had control over the doctors and surgeons of the Court (see p. 31); and this Tukuzdemir is mentioned by the contemporary traveller, Ibn-Batûta, as one of the chief nobles of the day.

A third lamp of exceptional interest, in the British Museum, must be referred to here, although it is believed to be of Damascus manufacture. It is quite different in style from the ordinary Cairo lamps: neither medallions nor shields appear upon it, nor the name of any Sultan or lord. The neck inscription (*A*) contains the beginning of the formula "God is the light," &c., down to الزجاجة, and the body inscription (*C*) continues it to الإمثال; the whole reads:—

(*A*). "God is the light of the heavens and the earth; his light is as a niche in which is a lamp, and the lamp in a glass; the glass | (*C*) as it were a glittering star; it is lit from a blessed tree, an olive neither of the east nor of the west, the oil thereof would well-nigh shine though no fire touched it—light upon light: God guideth to his light whom He pleaseth; and God strikes out parables [for mankind, and God is mighty over all.]" As before the neck inscription is blue on a gold ground, and the body inscription gold upon blue: the gold is unusually well preserved. Fine red tracery forms the borders. On the three loops for suspension the following inscription is distributed:—

مما عمل برسم | المسجد بالتربة | الصاحبة التقونة

"Of what was made for the mosque at the grave of the lady Et-Takûna." The meaning as well as the position of this curious inscription is unique: and the mosque and the lady Takûna, or Takwiya, or whatever her name may be, has not yet

been identified. Over the word **المجد** are signs which look like ١٩٨, and may be a date reversed, 891 (A.D. 1486).

A lamp exhibited by Mr. J. Dixon at the Burlington Fine Arts Club, in the summer of 1885, bore the inscription round the neck

المقر الكريم العالى ا = المو لو [ى] الاميرى الكبيرى = المالكي
المخدومى =

continued round the body,

التقى على الله تعالى يلغا الناصرى امير حاجب بالابواب الشريفة
"His excellency the generous, exalted, lord, great amir, royal, master, | trusting in God most High, Yelbughā, the retainer of En-Nāsir, lord chamberlain of the royal gates."

At the points = are medallions bearing a coat of arms : on a fess a scimitar azure, with brown mountings, chief gules, base brown.

Yelbughā is mentioned by El-Makrizy (in the *Khitat*) as a "wezir" and "ustāddār," and "one of the chief mamlūks of El-Melik Edh-Dhāhīr Barkūk," in reference to his restoration of the mosque El-Akmar in 1397. The lamp may have come from this very mosque ; but it must have been made after the death of Barkūk, since Yelbughā styles himself, not Edh-Dhāhīry, but En-Nāsiry, i.e. mamlūk of En-Nāsir Farag, Barkūk's son and successor. This will give the lamp a date of about 1405-10.

No two lamps are really alike ; the designs are infinite, and only in the inscriptions do we find any trace of monotony. The appropriateness of the passage from the Korān about "the light of the heavens and the earth," seems to have made it very popular with the glass-workers, and it recurs with almost the persistency of the still more celebrated "Throne Verse," which meets the eye in nearly every mosque and tomb in Cairo. Besides variety in ornament, the lamps sometimes differ widely in substance. The transparent glass, covered with inscriptions and designs in blue and red enamel, is certainly the ordinary material, but some lamps are of plain glass with no enamel at all ; such is the lamp of the church of Abu-Sarga, engraved in Mr. Butler's *Coptic*

Churches, which has the form of the lamps already described, but is perfectly plain, and has only three loops for suspension. A similar lamp is preserved in the Coptic church of Sitt Maryam hard by. Some of the lamps in the Arab Museum at Cairo are of pale green



FIG. 94.—VASE OF SULTAN BEYBAR II.

or blue glass, and semi-opaque, and I have seen one, of a rich deep blue, still hanging in a mosque. Lamps of the same shape and purpose were also made of pottery, but not, so far as we know, in Egypt. The earthenware lamps are chiefly of Damascus

and Rhodian ware, and belong to the sixteenth century; some of them reach very large sizes, and not a few are open to suspicion of owing their existence to the modern forger's desire to satisfy the passion of the collector. The Saracenic glass lamps do not appear to have been made much later than the fourteenth century, nor do we hear much of Eastern glass from travellers after this period. Venice had then taken up the rôle of glass-making.

The mode in which the lamps were used was this: they were suspended by chains of silver or brass to the wooden beams that generally run across the span of the smaller arches in a mosque, or else to the ceiling, or to the gallows brackets that stand out from the walls, as at Sultan Hasan. A small glass vessel containing oil was hung inside the lamp by means of wires hitched on to the rim, and a wick was soaked in the oil and lighted. The effect of the yellow light shining through the gold and the blue and red enamel, and showing off the inscriptions and ornament, must have been magnificent: the true Oriental delight in softened light, which we notice in the shady *meshrebiyas*, the subdued tones of the windows, the dull red and blue of the ceilings, is exhibited in this manner of introducing light into the mosques.

Besides the mosque lamps, the most prominent use of glass in Cairo was for the windows of both mosques and houses. Over the niche of a mosque, and over the lattice wood-work of a *meshrebiya* in a house, one generally sees examples of the characteristic stained glass windows of Cairo. In houses they are generally set in a row, in slight wooden frames, over the lattice, to the number of eight or more. The Cairo room in the South Kensington Museum (no. 1193—1883), has eleven of these stained windows, which are called in Arabic *kamariyas* or *shemsiyas*, "moonlike" or "sunlike." They consist of a rectangular frame of wood, about two inches broad by one thick, and forming an oblong about thirty inches high by twenty broad. The frame is filled with an arabesque, floral, architectural, or inscriptional

design in open stucco-work, the perforations being filled with stained glass. The mode of making these windows is the simplest. A bed of plaster is poured into the frame and suffered to set, and the design is then cut out with a gouge or other tool, after which the stained glass is fixed with more plaster on the outside of the window, which is then put up in its place, flush with the inside of the wall, and set in a slight wooden frame with a flat architrave round it forming a margin which conceals the



FIG. 95.



FIG. 96.

STAINED GLASS WINDOWS,
(South Kensington Museum.)

joints between the several windows. A couple of buttons keep the window from falling inwards, while the architrave secures it on the outside. It will be seen that no special skill is required for most of this work. The plaster is easily cut—as any one may prove who cares to make the experiment of carving a *kamariya* out of plaster of Paris—and the glass requires no fitting, for its superfluous edges are concealed by the plaster.

The material is fragile, no doubt, as those who have tried to bring it to England know, but moderate care on the part of the workman would ensure the safety of the *kamariya* between its cutting and its placing in the window. Where the art comes in is in the shaping of the perforations which form the design. The shape and slant of these holes are skilfully regulated according to the height they are to be raised above the spectator; and the thick plaster setting of the bright



FIG. 97.



FIG. 98.

STAINED GLASS WINDOWS.

(South Kensington Museum.)

little facets of glass gives the light that comes through the latter a shaded appearance which is singularly charming. It is difficult to give in words any clear idea of the exquisite effect which is obtained by a skilful management of the plaster rims; and, unfortunately, in our climate one cannot reckon on seeing the sun's rays streaming through the stained glass of those *kamariyas* which are exhibited in the South Kensington Museum.

With all the ingenuity of moulding that is noticeable in the plaster designs of these *kamariyas*, it must be admitted that the designs themselves are somewhat monotonous. Certain well-known types recur again and again, and it seems as if the artist had satisfied himself that no other design could be so successful and suited to the character of the light that was strained through. The South Kensington Museum contains thirty-seven of these windows, including the eleven belonging to the Cairo room, and the following is an analysis of the designs presented by this series :—

Pinks and other flowers growing from a vase—ten examples, varied of course in colours and slight details, but actually of the same design, which is the commonest of all. (Fig. 98.)

Cypress entwined with flower-stem—six examples. The spirals of the flower-stem are made to twist in opposite directions in a pair of these designs.

Cypress alone, one; or within a quatrefoil, surrounded by flowers, two. Two cypresses under an arch, one; or beneath a palm, one example. (Fig. 97.)

Kiosk between two cypresses or two buds (fig. 95.), or alone, six examples.

Scroll or sprig of flowers and leaves, three examples. (Fig. 96.)

Thus thirty of the thirty-seven windows are accounted for by five designs. The remainder consist of two Solomon's Seals, one rosette, and four portions of Arabic inscriptions, of which two or three form parts of Christian formulas. Examples of the kiosk, the palm spreading over two cypresses, the flowers growing out of a vase, and the scroll or sprig of flowers, are given in the illustrations (figs. 95—98).

The position of the row of *kamariyas* over a *meshrebīya* is almost always just beneath the eave of the window, above the lattice-work; but there is one exception in the South Kensington Museum. The Cairo room there has its eleven *kamariyas* in an intermediate

position, with a panel of lattice-work above as well as below the glass. This is so unusual, that competent authorities have asserted that the *meshrebiya* has been wrongly put together; but apart from the fact that the sketch I made of the window before it was taken down in Cairo shows the same arrangement, the joints of the wood-work prove that the window is in its original position, and could not have been set up in any other way.

CHAPTER IX.

HERALDRY ON GLASS AND METAL.

IN describing various objects in brass, bronze, and glass, especially the glass mosque-lamps, several coats of arms have been noticed. The subject deserves a section to itself, partly on account of its unexpectedness, and partly because it has a bearing upon the origin of our own heraldry. It is probable that the Crusaders brought back to Europe, together with lessons in chivalry and civilization, the germ of our system of heraldic bearings which has since been so carefully developed. The circumstance that coats of arms do not seem to have been borne in Europe before the end of the eleventh century, and were then very rudimentary, favours the conclusion that they had their source in the devices carried by the Saracen adversaries of the Crusaders. It is true, we are not able to point to any decided use of armorial badges in the East before the year 1190,* when the coins of 'Imād-ed-dīn Zenky, Prince of Singār, present the two-headed eagle which soon afterwards becomes common on the coinage of the Urtuky rulers of Āmid, and is found sculptured on the walls of that city. This is early enough as regards the emblem in question, for the Imperial Eagle was

* The badges on the Gate of Cairo, called the "Bāb-en-Nasr," may, perhaps, be the arms of the builder, El-Gemāly, and, if so, the use of armorial bearings in Egypt in the eleventh century is proved. They consist of a circular shield sculptured with a sixfoil ornament, and crossed behind by a straight sword; and of a pear-shaped shield with four studs or bosses and a serrated edge.

not adopted in Europe before 1345, but it cannot be regarded as satisfactory for all coats of arms. If other armorial bearings were known in Europe in the eleventh century, it is possible that they were carried to the East by the Crusaders, instead of being brought thence to the West. Several considerations, however, militate against this view. One is the Eastern origin of many of our heraldic terms : thus *gules* is the Persian *gul*, a rose ; *azure* is also Persian *lazurd*, blue ; *ermine* is the fur of an Armenian beast ; the pelican, ibis, griffin, and other charges of our coats of arms are clearly of Oriental derivation. Moreover, we know, from the researches of H. Brugsch Pasha, that the ancient Egyptian nomes had each their sign or badge, and that the temples were distinguished by separate devices on their banners. Various animals and birds were used for these purposes, and we even find the Star and Crescent, which, with the Lion and Sun, forms the sole remnant of heraldry among the modern Muslims. There is thus reason to believe that the heraldic bearings, which, as we shall see, were of common application during the 13th, 14th, and 15th centuries, were of Oriental descent, and though probably their frequency was a part of the general revival of the arts which accompanied the irruption of Turkish tribes into Syria and Egypt in the 12th and 13th centuries, they doubtless represent a custom that may have fallen into desuetude, but was never entirely forgotten, in the East.

The cause of the sudden abundance of these armorial shields, especially in the 14th century, was the military constitution of the Mamlūk empire. The various corps of the Mamlūk army were distinguished each by its separate banner, with its individual device. The Arabic and Persian word for a heraldic badge, or arms, *renk*, meant originally "colour," and then came to mean, like our own expression, the "colours" of a regiment, and hence any distinguishing "badge" or "bearing," "coat of arms." In the history of the Mamlūks we constantly meet with references to the *renks* of various Amīrs and Sultans, and of such *renks* being

assigned by the Sultan to a given Amir. When Es-Sâlih Ayyûb made Aybek his Taster (Jâshenkir), he gave him for his armorial badge a small table, in allusion to his office, which consisted in tasting all the food destined for the Sultan's table. This was the usual origin of these badges; they were not hereditary, and it is only by accident that the same *renk* is found to have been borne by two persons. Among the historical references to specific arms, we may mention the description of the *lion passant*, which was the crest or bearing first of Ibn-Tûlûn in the ninth century, and afterwards of the Sultan Beybars I., A.D. 1260-77, and which gave its name to the "Bridge of Lions," and also the "Garden of the Lion and Hyaena," which were ornamented by two lions carved in stone on the gateway. Abu-l-Mahâsin mentions another coat of arms, argent, on a fess vert, a scimitar gules, and adds that this elegant coat was much beloved by the ladies of Cairo, who used to tattoo their fingers with it. The same historian says that the arms of the Amir Salâr were black and white.

Saladin's crest was probably an *eagle*; Barkûk bore a white *Sunkur*, or falcon, which is the king of birds among the Arabs; and Kalaûn bore a "canting" coat, the representation of his own name, a *duck*.

Two finely sculptured single-headed eagles in the Arab Museum at Cairo, with well-chiselled wing and breast feathers, and spreading tails, set in pear-shaped shields, with a cup in the base, may have been Tûkuzdemir's arms (see above, p. 217).

A great many coats of arms have come down to us, some in metal, when the colours are of course uncertain, others in glass, when the enamel preserves the original tinctures. Some few devices are also preserved in mosaic, wood, and ivory, or inscribed on the walls of buildings. The circular medallions sculptured on the edifices of Kâit Bey and other Sultans may almost be regarded as blazons, and so may the similar medallions on glass lamps. The late E. T. Rogers Bey, whose long residence in the East and intimate acquaintance with Arabic literature

rendered him a high authority on all branches of Saracenic art, devoted considerable research to this subject, and collected a large number of Mamlūk coats of arms in a valuable memoir published in the *Bulletin de l'Institut Egyptien*, 1880. The following *résumé* of his discoveries, together with a few additions from my own observation, will be useful to those who do not possess the original monograph.

The general character of Saracenic armorial bearings is monotonous. The shield is almost always a circle, divided by a broad fess; though a glass lamp at the British Museum has the true shield form, and no fess. The usual charges are a cup (most frequent of all, and indicating that the bearer held the office of cup-bearer to the Sultan), a lozenge, a sword, a pair of cornucopias, a pair of polo sticks (indicating the office of Jökendār, or polo-master), keys (the badge of a chamberlain or governor), an eagle, and a target. These are often combined in various modes, of which the commonest consists in placing a cup on the fess, a second cup in the base, and a lozenge in the chief. The cornucopias are generally arranged on either side of one or other of the preceding charges. A very frequent bearing, which suggests curious speculations, is the hieroglyphic formula already referred to, p. 195. It is found as a sole charge, or in chief with other emblems, or inscribed upon the body of a cup, and its meaning is "Lord of the Upper and Lower country." Rogers Bey was of opinion that the Mamlūks who employed this coat must have been aware of its meaning, and that perhaps the interpretation of hieroglyphics had not become extinct in the fourteenth century. It is possible that, while the general hieroglyphic inscriptions were no longer understood, the particular title, which is of frequent occurrence on the temple walls, may have been preserved by the Copts; or the Mamlūks, without knowing the meaning, may have inferred from its frequency that it was a title of honour. In any case, its common appearance upon Saracenic objects is sufficiently surprising.

The following are some of the principal coats of arms belonging to historical Amirs and Sultans, in addition to the badges (lions, eagles, &c.) already mentioned :—

Sheykhū + A.H. 758 (1357). Per fess, gules and sable, on a fess or, a cup gules. (British Museum, and Linant Pasha's Collection.)

Bahādur, + 739 (1339). Two horizontal bars.

El-Māridāny, + 744 (1343). Gules, on a fess argent, a lozenge of the first.

Kahlis, an Amir of En-Nāsir (14th century). Gules, on a fess argent, a scimitar sable, mounted of the second. (S. K. M.)

Tukuzdemir, + 746 (1345). Gules, in chief an eagle displayed or, in base a cup of the last. (British Museum.)

Almās, + 734 (1334). Argent, a target or, with a bull's eye gules. (Linant Pasha's Collection.)

Arkatāy, + 750 (1349) (Governor of Safad). Two keys.

Ezbek, A.H. 905 (1499). On a fess, a cup supported by daggers (?); chief, a lozenge between cornucopias; base a cup between lozenges.

Beshtāk, A.H. 736 (1335). On a fess, a cup inscribed with the usual hieroglyphics, in chief diamond, in base a cup. This occurs on a bronze plate, and is consequently without tinctures; it is also seen on the ruin known as the "Bath of Beshtāk," near the mosque of Sultan Hasan.

Sultan Kāit Bey, + 901 (1495). On a fess, a cup between cornucopias; above a lozenge; beneath a second cup. The same coat was borne by the Amir Janbalāt, one of Kāit Bey's officers, and afterwards Sultan.

Many other combinations of cups and lozenges and the like might be enumerated, but these have not been identified with historical personages, and the student may refer for them to Rogers Bey's memoir. Among the more remarkable combinations, however, may be noted a flag upon the body of a cup, which probably refers to some military or court office; and in

colours, a rare arrangement is seen of Bektuman En-Nāsiry, azure on a fess argent, a cup gules. A common badge is the fleur-de-lis, generally very distinctly represented. It was borne, among others, by El-Ashraf Sha'bān, El-Mansūr 'Aly, and Es-Sālih Hājji, Sultans who all reigned in the second half of the fourteenth century, and it also occurs on the Māristān of Kalāūn at the beginning of the same century.

Two coats of arms preserved in the South Kensington Museum are different in details from any of those collected by Rogers Bey. The first occurs on a brass stand (see p. 195) which bears the title of a chief secretary of the fourteenth century; the second is from a scale-pan (no. 929, 1884), with no name, but is probably of the fifteenth century; the arms show the usual hieroglyphics on a fess, with a lozenge between trefoils in the chief, and a cup between trefoils in the base.

CHAPTER X.

POTTERY.

THE only pottery now made in Egypt is the porous unglazed ware, made principally at Ballasa, Kinē, and Semenhūd, which is used for water-bottles and utensils for the kitchen, and the roughly glazed variety of Asyūt, which is chiefly made for coffee-cups and ornaments, pipes, ash-trays, &c. Both are of red earth (or, the latter, sometimes black, as fig. 99), and are turned on the ordinary wheel. The ornament, when there is any, is coarse, but the forms are generally simple and graceful. Some of the shapes of the common porous drinking-bottles are singularly pure, and might serve as models to the most finished potter of Europe.*

No fine pottery is now made in Egypt with the floral decoration and pure siliceous glaze, such as we see in the well-known Damascus and Rhodian pottery. It is even a disputed point whether any of the tiles which adorn the mosques and houses of Cairo were made there, and some critics would have all fine earthenware to have been imported from Damascus and Persia. The mere fact that no fine pottery is now made in Cairo is no argument against its having been made there formerly. Anyone who will wander among the rubbish mounds of Old Cairo (Fustāt), after a high wind has disturbed the sand, will be rewarded by picking up fragments of glazed earthenware of a great variety of styles. These are the potsherds of former centuries, for no ware

* See the engravings in Lane's *Modern Egyptians*.

like these can be discovered in the present day. That these fragments represent wares actually made at Fustât, is proved by the fact that the "cockspurs" or clay tripods, upon which they were placed during the firing, are found with them; and that they were made before the almost total destruction of Fustât by fire in 1168 is at least probable, from their abundance and the absence of any similar ware made in Cairo at later periods. Many of these fragments have a gold or copper lustre; others are decorated with streaks of red and white; and a large proportion show coarse black designs on a turquoise or blue-green ground, resembling the ancient black and blue ware of Syria. It is only natural to conclude that the Saracens (or their subjects), who cultivated the potter's art with remarkable success in Persia and Syria, should have carried the same proficiency to so important a city of their empire as Cairo.

Fortunately there are a few references to Egyptian pottery scattered among the works of the historians and travellers of the East, though much fewer than could be desired. The

most important is the statement of Nâsir-i-Khusrau, who visited Egypt in the middle of the eleventh century of our Era. "At Misr" (i.e. Fustât), he writes, "they make earthenware of all kinds, so fine and diaphanous that one can see one's hand through it.



FIG. 99. ASYÛT COPPER-POT.

They make bowls, cups, plates, and other vessels ; decorate them with colours resembling [the iridescent stuff called] Būkalāmūn, so that the shades change according to the position in which the vessel is held."* This can only refer to an iridescent ware like the fragments found among the rubbish mounds of Fustāt, which have the metallic lustre described by Nāsir-i-Khusrau, and are painted with arabesque designs, inscriptions (unhappily not indicative of date), and sometimes with figures of animals. The fragments, however, are not translucent, as was the ware described by the Persian traveller ; but this may be explained by the likelihood of the more fragile ware having been reduced almost to powder, and thus escaping observation. The fact remains that fine pottery was manufactured at or near Cairo in the eleventh century ; and this point once established, there is no reason to seek for a different source for many of the tiles that are found in the decoration of the mosques and houses.

Tiles were the Saracenic substitute for mosaic. The last was used in mosques and palaces, though not to cover the upper portions of the walls ; but for private houses, and sometimes for mosques, a cheaper substitute was found in siliceous glazed tiles. We find them commonly in the dados of the reception-rooms in the better class of houses. How early they were introduced is not known, but the coating of the remarkable minarets of the mosque of En-Nāsir Mohammad in the citadel of Cairo is of glazed blue tiles, and this carries them back to the first quarter of the fourteenth century. It is worth noting that the Egyptians call wall-tiles *Kāshāny*, "pertaining to Kāshān," a Persian city, and the name points to the possible derivation of Syrian and Cairene faience from the early lustred earthenware of Persia. The fragments picked up at Fustāt, however, bear little resemblance to the early Persian ware, nor have the devices of the later Damascus and Cairo tiles much in common with the golden arabesques of the true Persian. There is nothing to prove

* *Sefer Namch*, ed. C. Schefer.

that the Persian pottery was the parent of the Cairene: it is equally possible that the Fustât fragments represent the origin of the Persian wares. But wherever the art originated, it is reasonable to assume that the Tartar invaders of Egypt in the twelfth and thirteenth centuries brought with them the idea of coating the walls of a tomb or house with tiles, such as they had seen on their route through Persia. The usual dates of the Persian star-shaped tiles are of the thirteenth century. This would give sufficient time for the art to be carried to Cairo by the Mamlûks, and used for the decoration of En-Nâsir's mosque in 1318. It is true that the Cairo tiles are not star-shaped, nor do they resemble their Persian contemporaries in colour or general treatment; they are not lustred, nor have they inscriptions or dates. Moreover, the potter's art was practised successfully in Egypt in the days of the Pharaohs. Still, the notion of *using tiles as wall coverings* may have come from the Persian tombs, though the material and process had long been familiar. It was in the adaptation and revival of old arts that the Saracens excelled.

Which of the numerous varieties of tiles, still to be seen *in situ* on the walls of Cairo buildings, are of native manufacture is a problem which does not appear likely to be solved until we have discovered tiles inscribed with names or dates, or obtained some fresh historical evidence. Some of the designs are so obviously akin to those known to have been made at Damascus, that it seems difficult to resist the conclusion that they were imported from that city. There is, however, another explanation of the similarity which is equally probable. It was, we know, the custom of the Mamlûk and other princes to send to various distant cities for artists and workmen, when they contemplated the erection of a great mosque or palace. We read of painters brought to Cairo from Basra and Wâsit, in Mesopotamia; of artisans furnished by the Greek Emperor to the Khalîfs at Damascus; of a Cairo mason, sent in 1287 by Kalaûn, to chisel that Sultan's name on a mosque then being built by Baraka

Khan in the Crimea; of an architect of Tebriz, who built the two minarets of the mosque of Kūsūn, at Cairo, on the model of the minaret set up in Tebriz by Khwāja 'Aly Shāh, the Vizīr of the Mongol King of Persia Abū-Sa'īd. This principle of collecting workmen from the chief centres of their arts may have operated in producing the mixed character of the tile-work of Cairo. Potters may have been brought from Damascus, Brūsa, Kutahia, and the other centres of tile-work, to ornament the mosques and houses of Cairo, and this would account for the purely Damascus patterns which we frequently see. Sometimes, no doubt, the tiles were actually imported. Ibn-Sa'īd tells us that quantities of *azulejos* (a word formed from the Persian *lazīrd*, lapis lazuli) were exported from Andalusia, and the mosque of Sheykū at Cairo was decorated with these Moorish tiles, some of which are now in the South Kensington Museum (St. Maurice Collection). In a similar way, the Lady Chapel of St. Mary Redcliffe, at Bristol, is paved with *azulejos*, which formed the cargo of a ship captured off the coast.

What has now been said will show that it is not easy to decide which tiles may be ascribed to the native potteries of Cairo. Some general principles, based on observation of prevailing types, may however be laid down. It is supposed, with some show of reason, that the thinner tiles are Cairene; as distinguished from the thick ware of Damascus. The Cairo colouring appears to be chiefly blue, in two shades, dark and turquoise, and the designs are floral, but simpler than those of Damascus. Puce and sage-green (typical tints of Damascus) are not among the colours of the Cairene tile potter. We do not find such large panels of tile-work at Cairo as in Syria, nor are the individual tiles larger than about ten inches square. In point of firing, the Cairo tiles are less flat and more often crackled than those of Damascus, and the tints often run into one another.

Some fine examples of Cairo tiles, or what are supposed to be such, are illustrated in Prisse d'Avenne's *L'Art Arabe*. Plates 119

and 120 show the magnificent tiled wall of the mosque of Āksunkur, built in A.H. 747-8 (1347). El-Makrizy tells us that this mosque was built of stone, with a vaulted roof, and was paved with marble. Āksunkur himself took a share in the labour. In 815 the Amir Tughān added a fountain in the middle of the court, the water of which was supplied by a wheel turned by an ox; the fountain was covered by a roof resting on marble columns, which the Amir took from the mosque of El-Khandak, which he had pulled down. But the historian provokingly says nothing about the tiles, and we are forced to believe that, as he could hardly have omitted to mention so salient and almost unique a feature if it had existed in his time, the tiles must have been inserted when Ibrāhīm Āghā restored the mosque in 1652. No more splendid example of the use of tiles in large surfaces can be seen in Cairo. It is impossible to give any idea of this magnificent wall, covered with tiles from top to bottom, and displaying the typical Cairene pattern of blue flowers and leaves in the utmost perfection. The *sebil*s or street fountains, are also sometimes lined with beautiful tiles; for example, that of 'Abd-er-Rahmān Kikhya, erected in the eighteenth century. Other tiles of Cairo style may be seen in the South Kensington Museum. I succeeded myself in bringing back, in 1883, several batches of tiles of identical pattern, with a view to showing their effect when combined in large surfaces; and there can be little doubt that these long series were made at the city where they were found, and probably by native potters. Cairo tiles, like those of Damascus, are bevelled at the edges, to allow the thick plaster bed in which they are set to penetrate between them at the back and thus give a hold, and also to save trouble in exactly squaring the edges.

We have not attempted to assign dates to any given tiles, except those of the mosque of En-Nāsir, for the sufficient reason that any such attempt must be entirely hypothetical. It is not easy to say which tiles are really of Cairo make; but it is even more

difficult to assign any fixed date to them. The Ibrāhim Āghā tiles are, indeed, probably of the date of the restoration in the seventeenth century; but the same patterns seem to have been copied for so long a period that these, even if the date were absolutely certain, would form no safe guide as to the date of other tiles of the same pattern.

Of other pottery than tiles, except the fragments found among the rubbish mounds, there is very little that can be safely attributed to Cairo. An opaque white ware of a creamy glaze, of which there are specimens in the South Kensington Museum, is said to be Cairene; and I am disposed to ascribe certain coarse blue and white dishes, with floral patterns, of which two are in the St. Maurice Collection, to Cairo potters, chiefly because they came from Cairo, and are unlike any other known ware of the East.

CHAPTER XI.

TEXTILE FABRICS.

THE East is the home of sumptuous apparel, and among the arts of the Saracens the manufacture of the materials of dress naturally occupied a prominent place. The very names which we still use for various kinds of silken and other stuffs recall their Eastern origin. Sarcenet is *saracenatum*, muslin is named after the famous *Mosil* fabric, tabby is the watered or striped stuff, named, after a street in Baghdād, 'Attaby or 'Uttaby; the silken canopies called *baudekins* or *baldacchini* were so named from Baldac, a western corruption of Baghdād;* Cramoisy is derived from the dye furnished by the Kermis insect; the German word for satin, *atlas*, means the smooth satin of Syria and Armenia; samite is probably Shāmy, "Syrian" fabric; the Genoese *mezzare* and the Spanish *almatair* are but the Arab garment called *mīsar*; and *jupe*, *jupon*, *giuppa*, are French and Italian descendants of the *gubba*, which Egyptian gentlemen still wear. European sovereigns who had a mind to dress in purple and fine linen naturally took their lessons in regal attire from the robes of Eastern princes. Italian tailors derived much of their materials and ideas from the superb models brought by merchants from Damascus, Cairo, and Baghdād; and Sicily became a noted centre

* See Col. Yule's admirable translation of Marco Polo. "At Baudas [Baghdād] they weave many different kinds of silk stuffs and gold brocades . . . wrought with figures of beasts and birds."—i. 67.

of rich textile fabrics under the Saracens and their successors the Norman kings. Ma'din, in Armenia, wrought the most beautiful *atlas* satin; Baghdād was famous for its tabby silk, Ba'lbekk supplied the finest white cotton, Tyre maintained its industrial fame by making carpets and mats, Rūm or Anatolia was celebrated for its silk and satin—we read of the Rūmian silk in the *Arabian Nights*—and wool came from Malatīa and Angora. Egypt was not backward in the arts of adornment. Cairo and Alexandria indeed imported many European stuffs, cloth, and other fabrics, from Venice, and fine linen and silks from Sicily; but they had also their own looms, and their produce was famous for its excellent quality. Alexandria had its special silk fabric, and Cairo was renowned for its manufacture of yellow silk standards: so fine was the texture of the best Cairene fabric that a whole robe could be passed through a finger-ring. Some of the smaller towns of Egypt were well-known centres of textile industry. Ibn Batūta joins with all Eastern authorities in praising the white woollen cloth of Behnesa. Debik was famous for its silks. "At Asyūt," says Nāsir-i-Khusrau, "they make woollen stuff for turbans which are unequalled in the whole world. The fine woollens of Persia, called Misry, all come from Upper Egypt, for they do not weave wool at Misr [Fustāt]. I saw at Asyūt a woollen waistcloth, such as I have not seen equalled at Lahōr or Multān—you might have mistaken it for silk tissue." Tinnis was renowned throughout the East for its fine cambric (*kasab*) used for turbans. White *kasab* was made at Damietta, whence our term 'dimity' (*Arabic*, *ḍimiyāṭy*), but that of Tinnis was woven of all colours by Coptic weavers, and was much preferred. Nāsir-i-Khusrau tells us that the products (*tiras*) of the royal factory at Tinnis were reserved exclusively for the sovereign of Egypt, and could neither be sold nor given to any one else. "A king of Fars," he adds, "offered 20,000 pieces of gold for a complete robe made of the Tinnis stuff at the royal factory, but, after trying for several years to obtain it, his agent was compelled to abandon the attempt. A royal turban of this fabric



FIG. 100.—SILK FABRIC OF ICONIUM.
Thirteenth Century. (Lyons Museum.)



cost 500 gold pieces." At Tinnis also was made the wonderful iridescent fabric called *Būkalamūn*,—probably from Abū-Kalamūn, the chameleon, as Col. Yule suggests,—which was said to change colour at different hours of the day, and was used for saddle-cloths and for covering the royal litters. At Beny Suweyf was manufactured an excellent sort of linen, called Alexandrian, which was exported to Europe.

All these manufactures were in great demand during the centuries of luxurious splendour which the independent rulers of Egypt enjoyed. The Fātimy Khalifs were fond of display beyond the dreams of even Oriental potentates, and many records of their sumptuous attire, their "gloss of satin and glimmer of pearls," have come down to us. There is a piece bearing the name of the Fātimy El-Hākim preserved at Nôtre-Dame at Paris, which shows the richness of the materials and the splendour of the colours; and El-Makrizy and other historians are full of the wonderful fabrics in which "the soul of my lord delighted." Some of these, like the countless dresses of 'Abda, daughter of the Khalif El-Mu'izz, were of Sicilian manufacture; but others were Persian, Anatolian, and native. We read of quantities of silk, shot with gold, and embroidered with the portraits of kings, and the tale of their deeds; of a piece of silk made at Tustar, in Persia, by order of the Khalif El-Mu'izz, in 964, which represented in gold and colours, on a blue ground, a sort of map of the various countries in the world, with cities, rivers, roads, and mountains, and their names embroidered in gold, and it is not surprising that this work cost 22,000 gold dinārs. Among the objects described in the celebrated inventory of the possessions of the Fātimy Khalif El-Mustansir (to which the preceding example belonged) were several magnificent tents made of cloth of gold, velvet, satin, damask and silk; some plain, some covered with representations of men, elephants, lions, peacocks and horses, and lined within with velvet or satin, silk from China, Tustar or Rūm, shot with fine gold. One huge pavilion of this kind was made for the Vizir

Yāzūry ; the pole, which was sixty-five cubits high and six and two-thirds thick, was a gift from the Greek Emperor ; the stuff was embroidered with figures of animals and the like, and the making of it is said to have occupied 150 men for nine years, at a cost of 30,000 dinārs. Another tent of this description, made at Aleppo, was supported by the mainmast of a Venetian galley, and it required seventy camels to transport it to the place where it was set up. A third was named *El-Katūl*, "the killer," because a man was sure to be crushed in pitching it. Behnesa was the place where such tents were often made, as well as many kinds of royal stuffs, embroideries and needlework, and large carpets, thirty cubits long, which were worth 10,000 grains of gold. The chief weavers and embroiderers of these magnificent fabrics were Copts, and to their influence may be ascribed the introduction of figures of animals and portraits of heroes and princes, a practice against the spirit of Mohammadan art, but quite in accordance with the traditions of the decorative work of the Lower Empire. Some concession was, however, made to Muslim prejudice by the skilful workmen of the Fātimis. If they would at times introduce the forbidden portrait of an animate being—under pain of being ordered on the Day of Judgment to find a soul for their portrait, or else to be dragged on their faces to hell—they would oftener depict such fabulous creatures as the griffin and the winged lion of Assyria, which fitly portrayed, to the Muslim mind, the fabulous beast Borāk on which the blessed Prophet made his miraculous dream-journey ; or they would represent the harmless form of the *hom*, or tree of life. The employment of Christians to weave such unorthodox designs as beasts and even human beings, however, was in itself a salve to the Muslim conscience : for the Christian weaver and not the Mohammadan wearer might be expected to receive the punishment. And the same consolation soothed the religious mind when it contemplated the rich silk tissues which the same impious infidel, unmindful of the Prophet's command that

silk was not permissible to his followers, had wrought for the believer's attire. A frequent characteristic of Saracen (and modern Eastern) weaving is the mixture of cotton or linen thread with the silk; and this was only another mode of evading the disagreeable ordinance of the tasteless Prophet of Islam.

Nāsir-i-Khusrau, who travelled in Egypt during the reign of El-Mustansir, gives us a glimpse of the magnificence of the Fātimy Court, in the eleventh century, which, coming from an eye-witness, is even more valuable than the traditions reported by El-Makrizy. He describes the Khalif's tent as made of satin of Rūm, covered with gold embroidery, and sown with precious stones. The furniture inside was of the same material, and so large was the pavilion that a hundred horsemen could stand in it. The entrance passage was lined with the "chameleon" fabric of Tinnis. The Khalif's state escort of 10,000 horsemen had all saddle-cloths of satin and "chameleon," and even the trappings of the camels and asses were covered with gold plates and precious stones. At the cutting of the Canal, always an imposing ceremony at Cairo, the Khalif appeared clad in a white robe with a large tunic, costing 10,000 dinārs, a turban of white stuff, and a valuable whip in his hand. Three hundred attendants preceded him, attired in Rūm brocade, and bearing pikes and axes, with bandelets on their legs; and the dress of the bearer of the jewelled parasol over the Khalif cost 10,000 dinārs. These values are doubtless exaggerated, and the figures run suspiciously often to ten thousand; but the main fact is that Nāsir-i-Khusrau, a competent and travelled witness, was dazzled with the splendour of the fabrics which he saw at the Fātimy Court.

Although it belongs to a later period, the engraving, fig. 100, may serve to give some idea of the silk fabric of Rūm. It is reproduced from an engraving which has been kindly lent me by M. Giraud, the keeper of the Archaeological Museum at Lyons, and it has been made the subject of a special essay by M. Pariset. Like the cope of St. Mexme, preserved in the

church of St. Etienne, at Chinon, this silk garment of Lyons had been converted into a church vestment—a chasuble. The following is an abridgment of M. Pariset's description of this remarkable specimen, which, though not itself of Egyptian manufacture, may nevertheless be held an example of the kind of silk weaving done by Saracen looms in the first half of the thirteenth century.*

The warp is of crimson silk, in two parts; one laid on ribands forms the plain ground, the other makes the pattern. The woof is also of red silk, of a delicate shade, but fast, and perfectly preserved, produced with cochineal (or perhaps kermis). The fabric thus belongs to the class called *holosericum*, because entirely made of silk, with no mixture of cotton. The present specimen, however, is enriched by a second woof, of gold, which alternates with the silk woof, and, traversing the whole breadth of the material, helps to form the design, while the silk woof makes the red ground. Such stuff was highly prized in the middle ages under the name of *chrysoclavum fundatum*. The gold thread consists of a silk core covered with gilt paper. Drawn gold thread was not used in ancient times, and leaf gold was the ordinary form of the precious metal employed for embroidery. The Chinese invented the process of laying thin gold leaf upon paper and rolling it round silk thread, and the Arabs, always in intimate trade relations with China, learned the process from the Celestials, and regularly employed it from the tenth to the fourteenth centuries. Great strength was attained when thin cows' hide or other skin was used instead of paper.† Though the object of the gold paper is of course to economise the

* *Note sur un drap d'or arabe que possède le Musée Industriel de Lyon : lue à l'Académie de Lyon, 30 Mai, 1882, par M. Pariset.*

† The gold leaf was attached to the paper or skin by gelatine, and then cut and rolled round the thread. The early Italian weavers imported this peculiar Saracenic gold thread: hence the *mysterium auri filati* of the chroniclers. See the interesting account of gold tissue in Fischbach, *Geschichte der Textil-Kunst*, 76, ff.

precious metal, the gold used for this example is very pure and rich. The arrangement of the woof is a proof of Oriental origin, and the design confirms this conclusion. Simple as it is—a pair of lions or griffins back to back, in a circular medallion bordered with flowers—it is characteristically Eastern. We have seen many instances of such opposed animals and birds on the metal-work and carving of the thirteenth century, and there is no doubt that the design is much older than Mohammadan times, and goes back to the productions of the old artists of Mesopotamia and Persia. We read in Quintus Curtius of robes worn by Persian satraps, adorned with birds beak to beak—*aurei accipitres veluti rostri in se irruerent pallam adornabant*. Plautus mentions Alexandrian carpets ornamented with beasts: *Alexandrina belluata conchyliata tapetia*.^{*} There is indeed reason to believe that the notion of such pairs of birds or beasts may have originated with the weavers of ancient Persia, and have been borrowed from them by the engravers of metal-work; for the advantage of such double figures would be specially obvious to a weaver. The symmetrical repetition of the figure of the bird or animal, reversed, saved both labour and elaboration of the loom. The old weavers, not yet masters of mechanical improvements, were obliged to work their warp up and down by means of strings, and the larger the design the more numerous became these strings and the more complicated the loom. Hence, to be able to repeat the pattern in reverse was a considerable economy of labour, and could be effected very simply on a loom constructed to work *à pointe et à reverse*. Examples of such repetitions of patterns, especially of symmetrical pairs of animals within circles, are common in Byzantine and Sassanian woven work, and the Saracens followed these models. Finally our piece of silk bears part of an Arabic inscription, which runs ‘*Ala-ed-din Abu-l-Feth Kay-*

^{*} For other notices, see Col. Yule's notes in his translation of Marco Polo, i. 67, 68, &c.

Kubād, son of Kay Khusrau, witness to the Prince of the Faithful. This Kay-Kubād was a Seljūk Sultan of Rûm, and reigned at Iconium, &c., from 1214 to 1239 A.D., and the occurrence of his name on the garment shows that it was a *tirās* made at a special royal factory, reserved, like that at Tinnis, for the exclusive use of the particular sovereign. This factory was no doubt in Rûm, and probably at the capital, Kōniya (Iconium), or perhaps one of the other large cities. "In Turcomania," says Marco Polo, "they weave the finest and handsomest carpets in the world, and also a great quantity of fine and rich silks of cramoisy and other colours, and plenty of other stuffs. Their chief cities are Conia, Savast [Sivās], and Casaria [Kaysariya]."* At all events there can be no doubt that this is the silk of Rûm of which we read so often in the records of state ceremonies and robes of honour in the Arabic histories.

An interesting parallel to the royal silk factory, or *Dār-et-tirās*, of Kay-Kubād, and to that of the Fātimy Khalif at Tinnis, is found in the similar institution at Palermo, which owed its foundation to the Kelby Amirs who ruled Sicily as vassals of the Fātimis in the ninth and tenth centuries, though it maintained its special character and excellence of work under the Norman kings. The factory was in the palace, and the weavers were Mohammadans, as indeed is obvious from a glance at the famous silk cloth preserved at Vienna, and called the "Mantle of Nürnberg," where a long Arabic inscription testifies to the hands that made it, by order of King Roger, in the year of the Hijra 528, or A.D. 1133.† Just as our piece of silk from Rûm is the *locus classicus*, so to say, for Anatolian weaving in the thirteenth century, and the Nôtre Dame silk for the Fātimy work of the beginning of the eleventh century, so this Nürnberg mantle gives us the type of Siculo-Arab work in the twelfth century, and enables us to form

* Col. Yule, i. 45 6.

† J. E. Giraud, *Les Origines de la Soie, son Histoire chez des Peuples de l'Orient*, p. 60.

some conception of what manner of hangings William of Palermo intended when he described the palace of Roger of Sicily :—

To enter fu encertines
De dras de soie à or ouvres
À œuvres d'or et à peintures,
À maintes diverses figures
D'oïseax, de bestes, et de gens.
Les chambres furent par dedans.
Paintes et bien enluminées.*

Of the thirty examples of "Saracenic" fabrics illustrated in Fischbach's beautiful work, "The Ornament of Textile Fabrics," the great majority are Sicilian, and although they are chiefly of the twelfth and thirteenth centuries, and most of them evidently woven by artists who were ignorant of Arabic, the designs are unmistakably Saracenic. The medallion arrangement of earlier times gives place on these Palermo fabrics to bands or rows of fabulous beasts, birds, and fish, generally in blue and green, on a deep-red ground, divided by bands of mutilated Arabic inscriptions or arabesque and geometrical panels.

This description of the silk chasuble of Rûm has brought us nearly to the time of the Mamlûks, and we shall find that these sumptuous sovereigns were as ardent patrons of the textile art as the Fâtimis. Some of the Mamlûk Sultans indeed prided themselves on a distinguished simplicity of attire, but the same cannot be said of their followers. The Amir Salâr, in the time of En-Nâsir, made himself famous by (among other services to the State) introducing a novel style of vest of white Ba'lbekk linen, sometimes strewn with precious stones. Another Mamlûk lord, of the court of Beybars, was allowed two gold brocade caps a month, each worth fifty dinârs, and a turban at forty; and Beybars himself, though he preferred to dress simply in black silk with no gold or jewels, made amends for his austerity by the rich apparel of his suite, and by the portable mosque, entirely

* F. Michel, *Recherches sur le Commerce et la Fabrication des Etoffes de soie, d'or et d'argent*, ii. 133.

constructed of woven stuffs, attached to his tent. A pavilion of red satin, with silken cords and pegs of sandalwood, strengthened with bands of silver gilt, was the Mamlūk idea of elegance. The description in Chapter I. of a state pageant under Beybars shows what display the Mamlūks thought suitable to their dignity; and the golden silk standards, the dresses of the pages, and rich housings of the horses, must have made the silk weavers a very flourishing community at that time. Silk was a passion with the Mamlūks; they lined their cuirasses with silk, housed their chargers in silk, wrapped their letters in silken covers, waved it in the air as flags, trod it under foot as drugget, hung it along the streets and over the shops on gala days; they wore it on their heads, and on their bodies; everything must be of silk brocade; their fairest slaves were exposed or sale in silken veils shot with gold thread; and though the Sultan Lāgin tried to put a stop to this bravery of attire, and issued sumptuary laws against gold embroidery in the caps and turbans of his Mamlūks, the reform was but temporary. The inventor of the new waistcoat flourished after Lāgin's reforms had been forgotten, and Barkūk soon introduced the Cherkis caps, with their spiral ornament and capacious dimensions.

Apart from royal robes, the most handsome stuffs were devoted to the manufacture of the dresses of honour (*Khil'as*) which Mohammadan princes were pleased to bestow on those who had succeeded in winning their royal approbation. A welcome ambassador, the bringer of good news, a Court favourite, a newly appointed official, or a servant who had done something (or nothing) that pleased his master, would be forthwith presented with a robe of honour perfumed with amber and musk. There was a precise etiquette about these dresses, and it was a matter of deep moment that the robe should be appropriate to the rank of the person to be thus distinguished. To give the wrong dress would be like giving the Michael and George to an Indian officer, or the C.I.E. to an Australian. El-Makrizy carefully



FIG. 101.—DAMASK, WORN BY HENRY THE SAINT.
Eleventh Century. (Bamberg Museum.)

distinguishes between the *Khiṭas* bestowed on men of the sword and those given to men of the pen. Of the former, the Centurions, or captains over 100, who were mighty lords, enjoyed the finest kind of robes. Red satin of Rūm, lined with yellow satin from the same country, formed the chief material, but the outer garment was embroidered with gold, and trimmed with miniver and beaver. A little cap of gold brocade was worn under the turban, the fine muslin of which was adorned with silk embroidery, while the extremities were formed by bands of white silk, bearing the titles of the Sultan. A girdle, enriched with rubies, emeralds, and pearls; a sword, inlaid with gold; a horse and gold housings from the royal stable, completed the equipment of a person distinguished by a dress of honour of the first rank. The prince of Hamāh, says El-Makrizy, received such a dress as this, only instead of muslin, the *shāsh* or turban was made of silk, shot with gold, manufactured at Alexandria. Less noble personages received a *Khiṭa* of the silk fabric called, from its designs, *tardwahsh*, "beast-hunts," which was also manufactured at Alexandria, as well as at Misr [Cairo] and Damascus. The dress was made of several bands of different colours, intermingled with gold-shot cambric, with embroidery between, and a border of cambric. The gold cap, girdle, and turban, as before, completed the dress of honour for a petty lord. The lower the rank the plainer and simpler became the robe of honour, and the degrees of difference were finely graduated. Vizirs, and men of the pen, were arrayed in robes of white *kangy*, or stuff of Kanga, trimmed with beaver, and lined with miniver. The under garment was of green *kangy*, and the turban of *dimity*, or linen of Damietta, embroidered. Lower ranks were deprived of the miniver lining, and had no fur on their sleeves. Judges and learned men had their robes of honour made of wool, without borders, white outside, and green underneath.

The number of specimens of mediæval textiles made by the Saracens that have been preserved to this day is unhappily

very small. Naturally silk is more perishable than ~~stone~~ or metal, and it was not to be expected that dresses should have outlived the vicissitudes of wear and fire to which such materials are exposed. The fine series of "Saracenic" stuffs lithographed by Fischbach in his "Ornament of Textile Fabrics" are, in my judgment, very rarely the work of Saracens. Most of them were probably made by Sarrasinas, or imitators of Saracenic style, at Palermo, Lucca, and other towns, where enterprising rulers imported Byzantine, Greek, and Oriental weavers to teach their own subjects. The mutilation of the Arabic inscriptions and the European development of the Saracenic ornament are signs of copyists, who were doubtless the successors of true Saracen artists, or at least were originally in communication with the chief centres of loom-industry in the East.* Nos. 144 and 145 of that work are, however, exceptions to the generally European character of the "Saracenic" illustrations. They belong to a cloak at Regensburg (Ratisbon), said to have been worn by the Emperor Henry VI., who died at Messina, and who may have had it as a present from the Norman King of Sicily. An Arabic inscription worked in the fabric states that it was made by Ustâd (foreman) 'Abd-el-'Aziz for King William II., who reigned in Sicily from 1169 to 1189. Another Arabic inscription contains a benedictory formula. This example is characteristically Saracenic: beasts of the chase, whorls, rosettes, and medallions, filled with geometrical ornament,

* Mr. Fischbach almost admits as much himself, when he occasionally notes his hesitation in ascribing a Saracenic stuff to an Eastern loom or to Sarrasinas at Lucca; and some of his "Saracenic" examples are even vaguely attributed to "Asia Minor or Greece." He has enjoyed the scholarly assistance of Prof. Karabacek, who has made considerable use of Col. Yule's and Sir George Birdwood's discoveries, and added the results of his own researches. The attribution of no. 13 to Ibrahim of Dehli, however, is not warranted by the Arabic inscription in the lithograph, which does not show the name of that Sultan. 88a, again, which "cannot be read," shows the name 'Abd-Allah clearly. Fischbach's *Geschichte der Textil-Kunst* contains Prof. Karabacek's information, but the Saracenic divisions are unhappily full of misprints, which detract from the scholarly aspect.



FIG. 102.—SILK FABRIC OF EGYPT OR SICILY.
(Nürnberg Museum.)



and a large gold band of benedictory inscription, recall Mamlūk decoration.

The illustration fig. 101 represents a damask garment, worn by Henry the Saint, 1002—1024, now in the Bamberg Museum. Here we see the system of ornament in medallions which the Saracens adopted from the Sassanian weavers of Persia. The pairs of lions (or chitahs), winged griffins, and parrots, closely resemble the style of Mōsil metal-work, and the geometrical borders are no less characteristic. Wherever the stuff was made (a point on which information is wanting), there can be no doubt that it is a typical example of early Saracenic weaving, which was founded upon and closely resembled the textile fabrics of the Sassanians and Byzantines. Fig. 100, the Seljūk silk, already described, preserves the main design of pairs of animals in medallions, but the surrounding ornament betrays the influence of the arabesque style. Fig. 102 represents a silk fabric at Nürnberg, which Fischbach describes as Siculo-Saracenic, and on which the human-headed sphinxes suggest an Egyptian influence, such as was exerted by the Fātimy Khalifs upon their Sicilian vassals. The ground is dark-red, the sphinxes are woven in gold thread, and the foliage is green. Prisse d'Avennes has also some excellent illustrations of Saracenic textiles: one from the Utrecht Museum, with stiff-looking green and read peacocks, beak to beak like the *aurei accipitres* of Q. Curtius, may be of the twelfth or thirteenth century, and an even earlier date may be claimed for the silk preserved at Toulouse, with its bird decoration, and benedictory Kufic inscriptions.

The history of textile ornament is strikingly illustrated by such mediæval fabrics as have been preserved in royal and ecclesiastical vestments, formed out of the spoils which the Crusading collector or the ambassador to Eastern Courts brought home. An attentive study of the admirable series of 160 plates published by Fischbach leaves no doubt either of the Sassano-Byzantine origin of Saracenic weaving, or of the penetrating influence of Saracenic design over the

early loom-workers of Italy and Sicily. How much Europe owes to Eastern design in textile fabrics may be judged from the prevailing Saracenic character of all the Italian work of the thirteenth, fourteenth, and fifteenth centuries; whence all Europe derived the artistic impulse.

The art of weaving, if it has languished in some centres where once it flourished, has not altogether died out in Egypt and Syria. A large proportion of the beautiful mixed silk and cotton stuffs that are offered for sale in the bazaars of Cairo are of native manufacture, though European dyes have not improved the colours. Kufiyas of yellow, red, and blue striped silk, shot with gold, familiar to all travellers in the East, are still made of exquisite beauty and delicacy, and the striped *gubbas* still worn by tradespeople, and, till the frock-coat invaded the East, by gentlemen, in Egypt, are generally made by Oriental weavers. Damietta indeed no longer manufactures its famous dimity, but there are plenty of cotton factories in Egypt, at Demenhur, Ikhmim and Cairo, and silk is still woven at the capital. Beny Suweyf, once famous for its linen, now makes only a coarse kind for the common people, besides woollen carpets; and linen and cotton factories are still seen at Mansûra.

CHAPTER XII.

ILLUMINATED MANUSCRIPTS.

AMONG the minor arts of the Mohammadans, none is more individual and characteristic than that of illuminating manuscripts. Possessing in the Naskhy or cursive hand a script unrivalled in flexuous elegance, the art of calligraphy may be said to have been forced upon the Saracens. Penmanship soon took its place next to scholarship in the estimation of the wise, and the names of great calligraphists, like Ibn-Mukla and Yākūt Er-Rūmy, became almost as famous as those of the poets and historians who provided them with the materials upon which to exercise their art. Many of the ordinary books of reference, such as dictionaries and annals, were transcribed with fastidious care in the fine bold Naskhy character, and a further step was taken when illumination was added to the beauty of penmanship. This embellishment was, however, reserved for the book of books, the "noble Korān," alone.* Ordinary manuscripts might be beautifully written, but the Korān only was ornamented with the rich illuminated title-pages and marginal medallions which form the chief points of decoration in Arabic manuscripts. It is only necessary to turn over the leaves of the thirteenth century Korān, preserved in the British Museum (Orient. 1009), to realise what

* The curious figures in certain MSS. of El-Hariry's *Makamāt* are quite exceptional, and probably the work of Christians.

infinite pains, what elaboration of the few decorative elements at their disposal, what skill in the arrangement and application of gold and colours, the Mohammadan illuminators expended upon their sacred book. The first two and last two pages are the subjects of specially rich decoration. They form each a rich panel, resembling a magnificent carpet. A central ornament of intricate geometrical or arabesque design, with the usual inscription, "Let none touch it save the purified," (by which the Muslim warns those who would handle the sacred volume to first perform the prescribed religious ablutions,) is surrounded by three borders, composed (1) of a sort of key-pattern, like what we have seen on Mösil metal-work, on a gold ground, (2) of flowers in various colours on a prevailing blue ground, and (3) of free scroll-work, showing the simple elements of the arabesque, which afterwards received such manifold elaboration. There are generally four or five such full-page illuminations in the best Korāns, two or three at each end of the volume. The remaining pages are less richly ornamented: the headings of chapters alone are framed in gold and colours, with arabesque and geometrical borders, and the outer margins of the leaves are enriched with numerous medallions, filled with arabesques and other designs. In the example referred to, these medallions are exceptionally numerous and varied. There are about three to each page, and their designs, notwithstanding their small compass—for a floral border enclosing a gold rosette is the prevailing type—present every change and contrast that the illuminator's ingenuity could suggest. The colours are chiefly carmine, deep blue, black and gold, but green and yellow sometimes appear. The bold writing—called *Thuluth*, or "Thrice-Naskhy"—of the text is lightened by gold rosettes and other ornaments, to indicate the punctuation and other directions to the person who chanted the Korān. The character of the flowers and arabesques, and the scarceness of pure geometrical ornament, lead to the impression that this beautiful manuscript was illuminated at Damascus; but it may



FIG. 103.—ILLUMINATED KORAN OF SULTAN SHA'BAN,
Fourteenth Century. (Viceregal Library, Cairo.)

have been the work of Cairo artists, trained in the Syrian school. Its date can hardly be later than the thirteenth century.

Another very splendid copy of the Korān in the British Museum (Add. 22,406) bears inscriptions which prove that it was written for Beybars Gāshenkir in the years 704-5, or A.D. 1304-5, while he was still *Ustāddār*, or major-domo, to the Sultan En-Nāsir ibn Kalaūn, and had not yet ascended the throne himself. It ~~was~~ no doubt prepared for his Khāngāh, or conventual mosque, which was completed in 706, and is still standing. This magnificent manuscript is in seven volumes, and is written from beginning to end in gold letters (within a delicate ink outline) on a ground resembling the key-pattern of the early metal-work. The first two pages are, as usual, fully illuminated, and covered with splendid arabesques in gold, on blue and red ground, with the inscription "Let none touch it save the purified" in white. The next two pages are framed with interlaced borders; but the rest of the volume, except the last page, has only the customary medallions, to mark the divisions of the text, and the rosettes and whorls, of red, blue, and gold, which are inserted in the writing for purposes of punctuation and accent. The marginal medallions are much less frequent than in the previously described Korān, and the designs are more monotonous. On the last page, within a gold frame with interlaced border, is the inscription

امر بكتابة هذا السبع الشريف واحواته المقر الكريم العالى المولوى
الاميرى الكبيرى الركنى استاد الدار العالية اعز الله نصره وكتب
محمد بن الوحيد

"The writing of this noble Seventh and its sisters was ordered by his excellency, the generous, the exalted, the lord, the great Amir, Rukn-ed-din, major domo altissimo, God magnify his triumphs; and Mohammad ibn El-Wahid wrote it." In the marginal medallions of the same page are the words ذهب محمد
ذهبه محمد "بن مبادر عفا الله عنه," "Mohammad ibn Mubādir gilded it, God assoil him!" Another of the seven volumes, or "sisters," opens

with magnificent geometrical panels filled with arabesques within a free scroll border; the pages are literally stiff with gold. At the end is an inscription similar to that already translated, but with the addition "and he finished the whole of it in the year 705." A portion of the margin of another volume gives the name of Sandal as the gilder, *تذهيب صندل*; and the seventh part has the further information that this volume "was incrustated (*زموك*) by Aydaghdy ibn 'Abd-Allah el-Bedry," which raises a difficulty as to what this "incrustation" was. The word is frequently employed to designate the laying on both of ink and of gold on a manuscript; but the previous use of the words *كتب* and *ذهب* for these two processes seems to suggest some different operation in the case of Aydaghdy. Dr. Rieu thinks it may refer to the delicate outlining of the characters, but this would more probably be termed *كتابة*. Perhaps the *زموك* was the laying on of the colours, as distinguished from the *تذهيب*, or gilding. It should be noticed that in this example the colours of the medallions, &c., are *painted over the gold*, which gives them a peculiar brilliancy.

A third Korān in the British Museum (Orient. 1401) is later—probably of the end of the fifteenth or beginning of the sixteenth century—and the decoration is very inferior to that of the two preceding examples. The rosettes and medallions are comparatively few, and the ornament is over-intricate, with something of the Alhambra effect. The headings of chapters are good, but the execution is coarse; the full pages at the beginning and end present some fine arabesques, but none of the designs approach in delicacy those of the first Korān described above. The colours are again laid over gold.

In the South Kensington Museum are the first two pages of a magnificent Korān, belonging to the fourteenth century. They contain the first chapter and the beginning of the second chapter of the Korān, in gold letters on a ground shaded with red lines, and covered with beautiful scrolls in two shades of blue; the



FIG. 104.—ILLUMINATED KORAN OF SULTAN SHA'IRAN,
Fourteenth Century (Viceregal Library, Cairo.)



border is of gold arabesque scroll-work on a blue ground, with here and there a red flower-like ornament. In the same Museum are a pair of fine leather boards, forming the binding of a Korān, upon which little less skill has been expended than upon the illumination of the manuscript itself. One of these is covered with gold tooling, and has a border containing "the Beautiful Names" of God; the other is tooled with a floral design with an oval centre. These are fine specimens of Saracenic book-binding, and probably date from the fourteenth or fifteenth century.

The finest illuminated Korāns in the world, however, are still preserved in Cairo, where the Khedive's library contains the volumes which have been rescued from the chief mosques of the city. Like the glass lamps, these precious manuscripts were no longer safe in the custody of the mosque guardians; enterprising collectors proved dangerous to mosque treasures; and the score of splendid *mushafs*, or copies of the Korān, now stored in the Darb-el-Gemāmiẓ, were prudently saved in time. The earliest of these is said to date from the second century of the flight, and thus to be nearly twelve hundred years old; but the tradition is somewhat apocryphal. The best examples, from the point of view of illumination, belong to the period of the Mamlūk Sultans, like most other works of art in Egypt. Three specimens of these Mamlūk manuscripts are given in figs. 103-5, after Professor Ebers' "Egypt," but the size of the present volume unfortunately precludes the possibility of representing more than a quarter of each page. The designs are, however, sufficiently shown even in this mutilated form, and perfect justice could not be done to them without reproduction in the true colours and gilt. The following is the description of the chief Korāns in the Khedive's library, as described by Spitta Bey, the late librarian:—The first is a Korān of Sultan Mohammad En-Nāsir ibn Kalāūn (1293—1341), 21 by 14 inches, written by Ahmad Yūsuf, a Turk,

* Baedeker's *Lower Egypt*, vol. 2.

in 730 of the Hīgira. It is written entirely in gilded characters, and there is also a second copy of a similar description. Several other Korāns date from the reign of Sultan Sha'bān (A.D. 1363-77), grandson of the last named, to whose mosque they were dedicated. The first of these, dating from 769, $27\frac{1}{4}$ by $19\frac{1}{4}$ inches, has not its titles written in the usual Cufic character, and the headings "in the name of God the all-merciful" are in gold. Of the same date and similar size is the Koran of Khawend Baraka, mother of Sha'bān. The first two pages are written in gilded and coloured characters, blue being the prevailing colour, and are illuminated with stars and arabesques; the next two are in gold, embellished with faint arabesques; and the whole work is written in a bold and excellent style. Another copy of Sultan Sha'bān, dating from 770, of the same width, but a little longer, contains some beautiful workmanship on the early pages. The text is wider than that of the last, and the book is bound in two volumes. Another and still larger copy, dating from the same year, measures $32\frac{3}{4}$ by 21 inches. All these last were destined for the school in the Khutt et-Tabbāneh (street of the straw-sellers), founded by Baraka, the Sultan's mother. Lastly we may mention another copy written in 778 (1377), by order of the same prince, by 'Aly ibn Mohammad El-Mukettib, and gilded by Ibrāhim El-Amidy. This copy measures 28 by $20\frac{1}{4}$ inches, and above each sūra is recorded the number of words and letters it contains. All these masāhif are written on thick and strong paper, and vie with each other in magnificence. The designs exhibit no great variety, but they are executed with the most elaborate care and neatness. The text of these Korāns is provided with red letters written above certain passages to indicate where the tone of the reader's voice is to be raised, lowered, or prolonged.

The collection contains three Korāns of the reign of Sultan Barkūk (1382-99), the oldest of which measures 41 by 32 inches. It was written by order of Mohammad ibn Mohammad, sur-

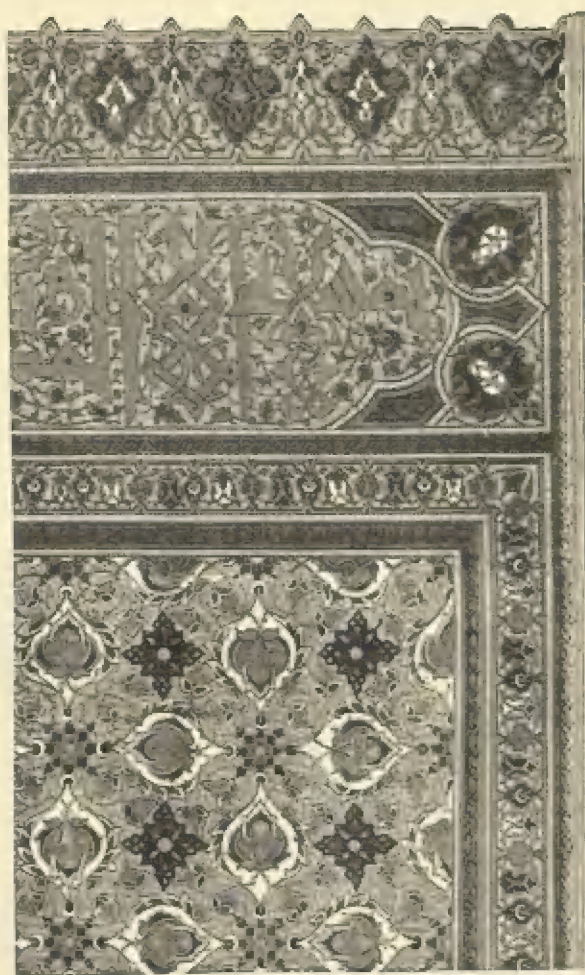


FIG. 105.—ILLUMINATED KORAN OF SULTAN EL-MUAYYAD.
Early Fifteenth Century. (Viceregal Library, Cairo.)

named Ibn-el-Butût, by 'Abderrahmân Es-Sâigh, with one pen, in sixty days, and revised by Mohammad ibn Ahmad ibn 'Aly, surnamed El-Kufty. A second copy, of the same Sultan's reign, and of similar size, has its first and last pages restored in the same style as those of other copies, but the modern workmanship is inferior to the ancient. A smaller Korân, of the year 801, measuring 23 by 19½ inches, is written entirely in gilded characters.

To Sultan Farag (1399—1412), the son of Barkûk, once belonged a copy of the Korân dating from 814, and brought to the library from the mosque of El-Muayyad. It measures 37 by 29½ inches, and was also written by 'Abderrahmân Es-Sâigh, the same skilful penman who had been previously employed by Barkûk, and the author of a pamphlet, entitled "*Sanâ-at el-Kitāba*" ('the art of writing'), and now preserved in this library. From the year 810 dates a fine copy, 38½ by 27 inches, written by Mûsa ibn Isma'il el-Kināny, surnamed Gaginy, for Sultan El-Muayyad (1412-21).

A copy which once belonged to the mosque of Kâit-Bey, dating from the year 909, or a century later than the last, and unfortunately in a very injured condition, is the largest Korân in the collection, measuring 44½ by 35 inches. To the period of the Ottoman Sultans belongs the small mushaf of Safiya, mother of Sultan Mohammad Khân, who caused fifty-two copies to be written by Mohammad ibn Ahmad El-Khalil Et-Tebrizy. It dates from 988, and measures 14 by 9½ inches. In it, as in one of the other copies, a black line alternates with a gilded one, and the first few pages are very beautifully executed. A copy of Huseyn-Bey Khemashûrgy, 21½ by 16½ inches, is written in a smaller character.

The description of such manuscripts fitly concludes a book on Saracenic art. In illumination, as in other branches of decoration, the peculiar character of Saracen ornament is clearly expressed. The effect is that of rich embroidery, or gold brocade; in other words, illumination, like mosaic, plaster, wood, and ivory, shows

the tapestry motives of Saracenic art. In the sanctuary of a mosque, or the *kā'a* of a house, in the complicated panelling of pulpit or ceiling, and in the chasing of vessels of silver,—everywhere the same carpet-like effect strikes one. Another salient feature of Saracenic work is exhibited in these manuscripts: rich as they are,—as rich even as the exquisite Book of Kells,—they suffer from the inevitable restrictions of religion. Mohammad forbade portraits of animate things; and though we have sometimes seen the prohibition evaded or defied, as a rule Moham-madan art is figureless, and the illuminated Korāns exhibit this peculiarity. Yet, without this same arid creed, the special features of Saracenic decoration would never have been developed for the benefit and example of Europe.

INDEX

OF NAMES, TITLES, AND PLACES.

'ABDA, 10 n., 201, 241.
 'Abd-el-'Aziz, 250.
 'Abd el-Kerim, 177.
 'Abd-er-Rahmān Kikhyā, 83, 199, 237.
 'Adil, El-, 12;—173.
 Akbugha, 215.
 Aksunkur, 52, 237.
 Almās, 188, 209, 230.
 'Aly, El-Mansūr, 20.
 Amīr, 17.
 Amīr Akhōr, 30.
 Amīr 'Alam, 25, 31.
 Amīr Bābdār, 34.
 Amīr el-Kebīr, 29.
 Amīr Gandār, 30.
 Amīr Meglis, 31.
 Amīr Shikār, 31.
 Amīr Silāh, 30.
 Amīr Tabikhānāh, 31.
 Amīr Tabar, 31.
 'Amr, 4, 51, 52, 65.
 Arkatūy, 230.
 Ashraf, El-, 100; see *Bars Bey*.
 Ashrafy, 18, 175 n.
 'Askar, El-, 5, 9.
 Asyūt, 110, 232, 240.
 Atābek, 29.
 Aybek, 13.
 Aydaghdy, 256

Aydekīn, 27.
 Ayyūlis, 10, 127.
 Azhar, El-, 8, 9, 52, 63, 65, 91.
 'Aziz, El-, 163.
 'Aziz, Iba, 164 n.
 BA'ALBEKK, 247.
 Bāb-en-Nasr, 65, 226 n.
 Bahādūr, 230.
 Bahry, 12.
 Ballāsa, 232.
 Barkūk, 52, 61, 63, 92, 114, 120, 188,
 213, 228, 258.
 Bars Bey, 61, 105.
 Bashmakdār, 31.
 Bawwāb, 76.
 Bedr el-Gemāly, 9.
 Behnesa, 240, 242.
 Bektemir, 91 n., 188.
 Beshtūk, 230.
 Beybars, 12, 16 n., 25-8, 32, 34 n., 52,
 64, 91, 109, 161, 186 ff., 228, 247.
 Beyn-el-Kasreyn, 8, 28, 53, 73.
 Beysary, 21, 23, 38, 174 ff.
 Bundukdāry, El-, 27.
 DAR-EL-'ADL, 11.
 Dawādār, 31, 195
 Debik, 240.

- Dikka, 58, 76, 144, 166.
 Dimyūt (Damietta), 240, 252.
 Dīnār, 56 *n*.
 Durkū'a, 77.

 EZBEK, 230.

 FARAG, 197, 219, 259.
 Fārisy, El-, 163 *n*.
 Fātimy, 162 f., 207, 241.
 Ferghāna, 54 *n*.
 Firush-khānāh, 32.
 Fustāt, El-, 4, 9, 232 f.

 GAMAKDĀR, 33.
 Gāmdār, 31.
 Gandār, 30.
 Gāshenkūr, 30.
 Gauhar, 8.
 Gāwaly, El-, 110.
 Gemāly, El-, 9, 226 *n*.
 Ghāshia, 33.
 Ghōry, El-, 53, 104, 107, 188.
 Gīza, 11, 109.
 Gubba, 32.
 Gūkendār, 31, 33.

 HĀGID, 30.
 Hākim, El-, 9, 52, 61, 63, 91, 241.
 Halka, 16.
 Hanafīya, 69.
 Hasan, Sultan, 53, 65-72, 92, 107, 118,
 119, 188, 209, 210.
 Hawāig-kash, 32.
 Hawāig-khānāh, 32.

 Ikhshīd, 7.
 Imām, 114.
 Ispeh-silary, 175.

 KĀ'A, 76 ff.
 Ka'ba, 52, 188.
 Kāfur, 7.

 Kāfur Es-Sallīb, 214.
 Kāhira, El-, 3, 9.
 Kahlīs, 216, 230.
 Kālī Bey, 53, 61, 72, 73, 92-100, 105,
 113, 114, 119, 198, 228, 230.
 Kalāūn, 12, 15, 18, 20, 73-5, 91, 104,
 121, 123 ff., 135.
 Kamarīyas, 221 ff.
 Kāmīl, El-, 12, 53, 91.
 Karāfa, 72, 92, 163 *n*.
 Karīkūsh, 11.
 Kāshān, 234.
 Kasir, El-, 164 *n*.
 Kasr Yūsuf, 11.
 Katāi', El-, 5, 9, 54.
 Kātim-es-Sirr, 31.
 Kebsh, El-, 19.
 Ketbūghā, 18-21.
 Kettāmy, El, 164 *n*.
 Khalīf, 4, 8, 21, 121.
 Khalīl, 18, 20.
 Khān, 82.
 Khān el-Khalīly, 18.
 Khatīb, 114.
 Khil'a, 248.
 Khumaraweyh, 6.
 Kibla, 58, 69 *n*.
 Kiné, 232.
 Kūfy, 67 *n*.
 Kurdy, El-, 169.
 Kurey, 120, 143, 189.
 Kūsan, 52, 64, 65, 118, 119.
 Kusūr-es-Zāhira, El-, 8.

 LĀGID, 14, 16 *n*, 20-4, 63, 115-7.
 Liwān, 57.
 Lulu, 172.

 MAK'AD, 76.
 Mulkaf, 79.
 Mamlūk, 12 ff., 18 *n*, 159 ff., 186 ff.
 Mandara, 76 ff.
 Mangutimūr, 16 *n*, 23.

- Mansūr 'Aly, El-, 20.
 Mansūra, 12.
 Māridāny, El-, 52, 59, 63, 65, 117, 230.
 Māristān, 12, 73-5, 123 ff.
 Masr-el-'Arīka, 9.
 Mastaba, 76.
 Medina, 49.
 Meshrebiya, 76 ff., 135 ff., 224.
 Meydā', 69.
 Meydān, 6.
 Mibkhara, 61.
 Mihrāb, 58, 69.
 Mihtār, 32, 193.
 Mimbar, 58, 113 ff.
 Misr, 4, 209.
 Mohammad : see *Nāsir*.
 Mohammad ibn El-Wāhid, 255.
 Mōsil (style), 124 ff., 153 ff., 170 ff.
 Mu'allim, Beny, 164 n.
 Mu'yyad, El-, 52, 63, 65, 68 n., 113, 119, 188, 259.
 Mubāshir, 29.
 Muhtesib, 32.
 Mu'izz, El-, 7, 8, 163 n., 241.
 Mukaddam, 30.
 Mushidd, 32.
 Mustansir, El-, 9, 10, 108, 162, 201, 241, 243.
 NĀSB-ES-SALTANA, 18, 20, 29.
 Nāsir Mohammad, En-, 11, 18, 34, 52, 65, 91, 128, 161, 188 ff., 234, 257.
 Naskhy, 57 n.
 Nāzūk, En-, 164 n.
 Nefīsa, Sitta, 121.
 Nūr-ed-dīn, 127.
 RAKHWĀNY, 32.
 Ramla, 108-10.
 Ras Nauba, 29.
 Rashīda, 9 n.
 Rikāb-khānāh, 32.
 Rōda, 12.
 Rukeyya, Sitta, 121 n.
 Rūm, 241, 243 ff.
 SĀG, 6.
 Sahn-el-Gāmi', 69.
 Sākya, 30.
 Saladin, 10, 11, 16 n., 127, 128, 228.
 Salār, 228, 247.
 Sālīh, Es-, 12, 13, 15, 27, 121.
 Sālīh, Mohammad, 148, 149.
 Saphadin, 12.
 Sātilmish, 193.
 Sebül, 82, 98.
 Selāhkhōry, 30.
 Selim, 3.
 Semenhūd, 232.
 Shadd, 32.
 Shāfi'y, Esh-, 12.
 Sha'bān, 258.
 Sha'bān, Umm-, 148.
 Sharabdar, 32.
 Sharab-khānāh, 32.
 Sheger-ed-durr, 13.
 Sheykhū, 119, 209, 216, 230.
 Shugā' ibn Hanfar, 170.
 Shugāy, 18.
 Sicily, 10, 163, 240, 247, 250.
 Silāhdār, 30.
 Sūk-el-Kestiyān, 165.
 Sūr (Tyre), 208.
 Suyūfy, 59.
 Syrian style, 159, 183 ff.
 TABARDĀR, 31, 33.
 Tabl-khānāh, 31.
 Takhtabōsh, 76.
 Tulāi' ibn Ruzeyk, 91, 118 n., 188.
 Tebriz, 236, 259.
 Tinnis, 240.
 Tirāz, 246.
 Tishtdār, 32.
 Tisht-khānāh, 32, 174.
 Titles, Mamlūk, 18 n.

- | | |
|--|--|
| <p>Tughān, 237.
 Tukuzdemir, 217, 228, 230.
 Tūlūn, Ibn, 3, 5, 6, 22, 52, 53-64, 89,
 90, 115-117, 133, 228.
 Turkish and Tartar names, 14 n.
 Tustar, 241.

 UJĀKY, 29.
 Ustāddār, 29, 31, 250.

 VENICE, 168, 208.
 Vizir, 18, 29.</p> | <p>WĀLY, 32.
 Wekāla, 82, 93-100.

 YELBUGHA, 219.

 ZARD-KHĀNĀH, 30.
 Zenky, Beny, 127, 152, 226.
 Zeyn, Ibn-es-, 182.
 Zimamdār, 31.
 Zuheyr, 36.
 Zunnāry, 33.
 Zuweyla, Bāb, 19.</p> |
|--|--|

F 48

11, HENRIETTA STREET, COVENT GARDEN, W.C.

APRIL, 1886.

A

Catalogue of Books

PUBLISHED BY

CHAPMAN & HALL, LIMITED,

INCLUDING

*Drawing Examples, Diagrams, Models,
Instruments, etc.,*

ISSUED UNDER THE AUTHORITY OF

THE SCIENCE AND ART DEPARTMENT,
SOUTH KENSINGTON,

FOR THE USE OF SCHOOLS AND ART AND SCIENCE CLASSES.

THOMAS CARLYLE'S WORKS.

MESSRS. CHAPMAN & HALL beg to announce that an entirely New Edition of the Writings of MR. CARLYLE, to be completed in Seventeen Volumes, demy 8vo, is now publishing, called

THE ASHBURTON EDITION.

This Edition is handsomely printed and contains the Portraits and Illustrations, and is issued in Monthly Volumes, at Eight Shillings a Volume, viz.:

VOL. 1.	THE FRENCH REVOLUTION.	Vol. 1.	[Ready.
" 2.	THE FRENCH REVOLUTION AND PAST AND PRESENT.		[Ready.
" 3.	SARTOR RESARTUS; HEROES AND HERO WORSHIP.		[Ready.
" 4.	LIFE OF JOHN STERLING—LIFE OF SCHILLER.		[Ready.
" 5.	LATTER-DAY PAMPHLETS—EARLY KINGS OF NORWAY—ESSAY ON THE PORTRAIT OF JOHN KNOX.		[Ready.
" 6.	LETTERS AND SPEECHES OF OLIVER CROMWELL.		
" 7.	Ditto	ditto	Vol. 1. [Ready.
" 8.	Ditto	ditto	" 2. [Ready.
" 9.	HISTORY OF FREDERICK THE GREAT.		" 3. [Ready.
" 10.	Ditto	ditto	Vol. 1. [Ready.
" 11.	Ditto	ditto	" 2. [Ready.
" 12.	Ditto	ditto	" 3.
" 13.	Ditto	ditto	" 4.
" 14.	Ditto	ditto	" 5.
" 15.	CRITICAL AND MISCELLANEOUS ESSAYS.		" 6.
" 16.	Ditto	ditto	Vol. 1.
" 17.	Ditto	ditto	" 2.
			" 3.

Ten Volumes are now ready.

BOOKS

PUBLISHED BY

CHAPMAN & HALL, LIMITED.

ABLETT (T. R.)—

WRITTEN DESIGN. Oblong, sewed, 6d.

ABOUT (EDMOND)—

HANDBOOK OF SOCIAL ECONOMY; OR, THE
WORKER'S A B C. From the French. With a Biographical and Critical
Introduction by W. FRASER RAE. Second Edition, revised. Crown 8vo, 4s.

THE ARMIES OF THE NATIVE STATES OF INDIA.
Reprinted from the *Times* by permission. Crown 8vo, 4s.

BADEN-POWELL (GEORGE)—

STATE AID AND STATE INTERFERENCE. Illus-
trated by Results in Commerce and Industry. Crown 8vo, 9s.

BARTLEY (G. C. T.)—

A HANDY BOOK FOR GUARDIANS OF THE POOR.
Crown 8vo, cloth, 3s.

BAYARD: HISTORY OF THE GOOD CHEVALIER,
SANS PEUR ET SANS REPROCHE. Compiled by the LOYAL SANCYITEUR;
translated into English from the French of Loredan Larchey. With over 200
Illustrations. Royal 8vo, 22s.

BELL (DR. JAMES). Principal of the Somerset House Laboratory—

THE CHEMISTRY OF FOODS. With Microscopic
Illustrations.

PART I. TEA, COFFEE, SUGAR, ETC. Large crown 8vo, 2s. 6d.

PART II. MILK BUTTER, CEREALS, PREPARED STARCHES, ETC.
Large crown 8vo, 3s.

BENNET (WILLIAM)—

KING OF THE PEAK: a Romance. With Portrait.
Crown 8vo, 6s.

BENSON (W.)—

MANUAL OF THE SCIENCE OF COLOUR. Coloured
Frontispiece and Illustrations. 12mo, cloth, 2s. 6d.

PRINCIPLES OF THE SCIENCE OF COLOUR. Small
4to, cloth, 15s.

BINGHAM (CAPT. THE HON. D.)—

**A SELECTION FROM THE LETTERS AND
DESPATCHES OF THE FIRST NAPOLEON.** With Explanatory Notes.
3 vols. demy 8vo, 42 ss.

THE BASTILLE: Its History and Chronicles. [*In the Press.*]

BIRDWOOD (SIR GEORGE C. M.), C.S.I.—

THE INDUSTRIAL ARTS OF INDIA. With Map and
174 Illustrations. New Edition. Demy 8vo, 14s.

BLACKIE (JOHN STUART), F.R.S.E.—

**THE SCOTTISH HIGHLANDERS AND THE LAND
LAWS.** Demy 8vo, 9s.

**ALTAVONA: FACT AND FICTION FROM MY LIFE
IN THE HIGHLANDS.** Third Edition. Crown 8vo, 6s.

BLATHERWICK (DR.)—

PERSONAL RECOLLECTIONS OF PETER STONNOR,
Esq. With Illustrations by JAMES GUTHRIE and A. S. BOYD. Large crown 8vo, 6s.

BLOOMFIELD'S (BENJAMIN LORD), MEMOIR OF—
MISSION TO THE COURT OF BERNADOTTE. Edited by GEORGIANA,
BARONESS BLOOMFIELD, Author of "Reminiscences of Court and Diplomatic Life."
With Portraits. 2 Vols. demy 8vo, 52s.

BOYLE (FREDERICK)—

**ON THE BORDERLAND—BETWIXT THE REALMS
OF FACT AND FANCY.** Crown 8vo, 11s. 6d.

BOULGER (DEMETRIUS C.)—

**GENERAL GORDON'S LETTERS FROM THE
CRIMEA, THE DANUBE, AND ARMENIA.** 2nd Edition. Crown 8vo, 5s.

BRADLEY (THOMAS), of the Royal Military Academy, Woolwich—

ELEMENTS OF GEOMETRICAL DRAWING. In Two Parts, with Sixty Plates. Oblong folio, half bound, each Part 16s.

BRAY (MRS.)—

AUTOBIOGRAPHY OF (born 1789, died 1883).

Author of the "Life of Thomas Stothard, R.A.," "The White Hoods," &c.
Edited by JOHN A. KEMPE. With Portraits. Crown 8vo, 10s. 6d.

MRS. BRAY'S NOVELS AND ROMANCES.

New and Revised Editions, with Frontispieces. 3s. 6d. each.

THE WHITE HOODS; a Romance of Flanders.
DE FOIX; a Romance of Bearn.

THE TALBA; or, The Moor of Portugal.
THE PROTESTANT; a Tale of the Times of Queen Mary.

NOVELS FOUNDED ON TRADITIONS OF DEVON AND CORNWALL.

FITZ OF FITZFORD; a Tale of Destiny.
HENRY DE POMEROY; or, the Eve of St. John.
TRELAWNY OF TRELAWNE; or, a Romance of the West.

WARLEIGH; or, The Fatal Oak.
COURTENAY OF WALREDDON; a Romance of the West.
HARTLAND FOREST AND ROSE-TEAGUE.

MISCELLANEOUS TALES.

A FATHER'S CURSE AND A DAUGHTER'S SACRIFICE.
TRIALS OF THE HEART.

BROADLEY (A. M.)—

HOW WE DEFENDED ARABI AND HIS FRIENDS.

A Story of Egypt and the Egyptians. Illustrated by FREDERICK VILLIERS.
Demy 8vo, 12s.

BROMLEY-DAVENPORT (the late W.), M.P.—

SPORT: Fox Hunting, Salmon Fishing, Covert Shooting,

Deer Stalking. With numerous Illustrations by General CREALOCK, C.B.
Small 4to, 22s.

A New and Cheaper Edition. Crown 8vo, 6s.

BUCKLAND (FRANK)—

LOG-BOOK OF A FISHERMAN AND ZOOLOGIST.

With numerous Illustrations. Fourth Thousand. Crown 8vo, 3s.

BURCHETT (R.)—

DEFINITIONS OF GEOMETRY. New Edition. 24mo,
cloth, 3d.

LINEAR PERSPECTIVE, for the Use of Schools of Art.
New Edition. With Illustrations. Post 8vo, cloth, 7s.

PRACTICAL GEOMETRY: The Course of Construction
of Plane Geometrical Figures. With 137 Diagrams. Eighteenth Edition. Post
8vo, cloth, 5s.

BURLEIGH (BENNET G.)—

DESERT WARFARE: Being the Chronicle of the Eastern
Soudan Campaign. With Maps. Demy 8vo, 12s.

CAMPION (J. S.)—

ON THE FRONTIER. Reminiscences of Wild Sports,
Personal Adventures, and Strange Scenes. With Illustrations. Second Edition.
Demy 8vo, 16s.

ON FOOT IN SPAIN. With Illustrations. Second Edition.
Demy 8vo, 16s.

CARLYLE BIRTHDAY BOOK. Second Edition. Small
fcap. 8vo, 3s.

CHAMPEAUX (ALFRED)—

TAPESTRY. With Woodcuts. Cloth, 2s. 6d.

CHURCH (A. H.), M.A., Oxon.—

ENGLISH PORCELAIN. A Handbook to the China
made in England during the Eighteenth Century, as illustrated by Specimens
chiefly in the National Collection. With numerous Illustrations. Large crown
8vo, 3s.

ENGLISH EARTHENWARE. A Handbook to the
Wares made in England during the 17th and 18th Centuries, as illustrated by
Specimens in the National Collections. With 49 Illustrations. Crown 8vo, 3s.

PLAIN WORDS ABOUT WATER. Illustrated. Crown
8vo, sewed, 6d.

**FOOD: A Short Account of the Sources, Constituents,
and Uses of Food.** Crown 8vo, cloth, 3s.

PRECIOUS STONES: considered in their Scientific and
Artistic Relations. With Illustrations. Crown 8vo, 2s. 6d.

CLINTON (R. H.)—

A COMPENDIUM OF ENGLISH HISTORY, from the
Earliest Times to A.D. 1872. With Copious Quotations on the Leading Events and
the Constitutional History, together with Appendices. Post 8vo, 7s. 6d.

COBDEN, RICHARD, LIFE OF. By JOHN MORLEY. With
Portrait. 2 vols. Demy 8vo, 32s.

New Edition. Portrait. Crown 8vo, 7s. 6d.

Popular Edition, with Portrait, sewed, 1s.; cloth, 2s.

CHAPMAN & HALL'S ONE SHILLING SERIES OF BOOKS.—Crown 8vo, sewed.

MEMOIRS OF A STOMACH. Written by Himself, that all who eat may read. Edited
by a Minister of the Interior. 1s.

FAST AND LOOSE. A Novel. By ARTHUR GRIFFITHS, Author of "The Chronicles of
Newgate." 1s.

A SINGER'S STORY, as related by the Author of "Flitters, Tatters, and the Counsellor."

NUMBER NINETY-NINE. A Novel. By ARTHUR GRIFFITHS. 1s.

THE CASE OF REUBEN MALACHI. By H. SUTHERLAND EDWARDS. 1s.

SARTOR RESARTUS. By THOMAS CARLYLE. Crown 8vo, sewed, 1s.

CHAPMAN & HALL'S SERIES OF POPULAR NOVELS.

New and Cheaper Editions of Popular Novels. Crown 8vo.

KARMA. By A. P. SINNETT. 3s. 6d.

MOLOCH. A Story of Sacrifice. By MRS. CAMPBELL PRARD, Author of "Nadine." 6s.

FAUCIT OF BALLIOL. By HERMAN MERVILLE. 6s.

AN AUSTRALIAN HEROINE. By MRS. CAMPBELL PRARD. 6s.

STORY OF AN AFRICAN FARM. By RALPH IRON. 5s.

TO LEEWARD. By F. MARION CRAWFORD. New Edition. 5s.

AN AMERICAN POLITICIAN. By F. MARION CRAWFORD. 5s.

TIE AND TRICK. By HAWLEY SMART. 6s.

COOKERY—

THE PYTCHLEY BOOK OF REFINED COOKERY
AND BILLS OF FARE. By MAJOR L—. Second Edition. Large crown 8vo,
8s.

OFFICIAL HANDBOOK FOR THE NATIONAL
TRAINING SCHOOL FOR COOKERY. Containing Lessons on Cookery;
forming the Course of Instruction in the School. Compiled by "R. O. C."
Fourteenth Thousand. Large crown 8vo, 2s.

BREAKFAST AND SAVOURY DISHES. By "R. O. C."
Seventh Thousand. Crown 8vo, 1s.

COOKERY—Continued—

HOW TO COOK FISH. A Series of Lessons in Cookery, from the Official Handbook to the National Training School for Cookery, South Kensington. Compiled by "R. O. C." Crown 8vo, sewed, 3d.

SICK-ROOM COOKERY. From the Official Handbook to the National School for Cookery, South Kensington. Compiled by "R. O. C." Crown 8vo, sewed, 6d.

THE KINGSWOOD COOKERY BOOK. By H. F. WICKEN. Crown 8vo, 2s.

COURTNEY (W. L.)—

CONSTRUCTIVE ETHICS: A Review of Modern Philosophy and its Three Stages of Interpretation, Criticism, and Reconstruction. Denby 8vo. *[In April.]*

CRAIK (GEORGE LILLIE)—

ENGLISH OF SHAKESPEARE. Illustrated in a Philological Commentary on his "Julius Cæsar." Seventh Edition. Post 8vo, cloth, 5s.

OUTLINES OF THE HISTORY OF THE ENGLISH LANGUAGE. Tenth Edition. Post 8vo, cloth, 2s. 6d.

CRAWFORD (F. MARION)—

TO LEEWARD. Crown 8vo, 5s.

AN AMERICAN POLITICIAN. Crown 8vo, 5s.

CRIPPS (WILFRED)—

COLLEGE AND CORPORATION PLATE. A Handbook for the Reproduction of Silver Plate. With numerous Illustrations. Large crown 8vo, cloth, 2s. 6d.

DAVITT (MICHAEL)—

LEAVES FROM A PRISON DIARY; or, Lectures to a Solitary Audience. 2 vols. Crown 8vo, 22s.

In one vol. Crown 8vo, cloth, 6s.

Cheap Edition. Crown 8vo, sewed, Ninth Thousand, 1s. 6d.

DAUBOURG (E.)—

INTERIOR ARCHITECTURE. Doors, Vestibules, Staircases, Anterooms, Drawing, Dining, and Bed Rooms, Libraries, Bank and Newspaper Offices, Shop Fronts and Interiors. Half-imperial, cloth, 4s. 12s. 6d.

DAVIDSON (ELLIS A.)—

PRETTY ARTS FOR THE EMPLOYMENT OF LEISURE HOURS. A Book for Ladies. With Illustrations. Denby 8vo, 6s.

DAY (WILLIAM)—

THE RACEHORSE IN TRAINING, with Hints on Racing and Racing Reform, to which is added a Chapter on Shoeing. Fifth Edition. 2vo, 5s.

D'HAUSSONVILLE (VICOMTE)—

SALON OF MADAME NECKER. Translated by H. M.

TROLLOPE. 2 vols. Crown 8vo, 12s.

DE KONINCK (L. L.) and DIETZ (E.)—

PRACTICAL MANUAL OF CHEMICAL ASSAYING,

as applied to the Manufacture of Iron. Edited, with notes, by ROBERT MALLST.

Post 8vo, cloth, 6s.

DICKENS (CHARLES)—See pages 32—38.

THE LETTERS OF CHARLES DICKENS. Edited

by his Sister-in-Law and his Eldest Daughter. Two vols. medium with "The Charles Dickens Edition" of his Works. Crown 8vo, 2s.

THE CHARLES DICKENS BIRTHDAY BOOK.

Compiled and Edited by his Eldest Daughter. With Five Illustrations by his Youngest Daughter. In a handsome fcap. 4to volume, 12s.

DRAGE (GEOFFREY)—

CRIMINAL CODE OF THE GERMAN EMPIRE.

Translated with Prolegomena, and a Commentary, by G. DRAGE. Crown 8vo, 6s.

DRAYSON (LIEUT.-COL. A. W.)—

**THE CAUSE OF THE SUPPOSED PROPER MOTION
OF THE FIXED STARS.** Demy 8vo, cloth, 10s.

**PRACTICAL MILITARY SURVEYING AND
SKETCHING.** Fifth Edition. Post 8vo, cloth, 4s. 6d.

DREAMS BY A FRENCH FIRESIDE. Translated from the

German by MARY O'CALLAGHAN. Illustrated by Fred Roe. Crown 8vo, 7s. 6d.

DUPANLOUP, MONSIEUR (BISHOP OF ORLEANS),

LIFE OF. By ANNÉ F. LAGRANGE. Translated from the French by LADY
HARRIS. With Two Portraits. 2 vols. 8vo, 38s.

DYCE'S COLLECTION. A Catalogue of Printed Books and
Manuscripts bequeathed by the REV. ALEXANDER DYCE to the South Kensington
Museum. 2 vols. Royal 8vo, half-morocco, 14s.

A Collection of Paintings, Miniatures, Drawings, Engravings,
Rings, and Miscellaneous Objects, bequeathed by the REV. ALEXANDER DYCE
to the South Kensington Museum. Royal 8vo, half-morocco, 6s. 6d.

DYCE (WILLIAM), R.A.—

**DRAWING-BOOK OF THE GOVERNMENT SCHOOL
OF DESIGN; OR, ELEMENTARY OUTLINES OF ORNAMENT.** Fifty

selected Plates. Folio, sewed, 5s.; 18s.

Text to Diss. Sewed, 8d.

EDWARDS, H. SUTHERLAND—

FAMOUS FIRST-NIGHT REPRESENTATIONS.

[In the Press.]

EGYPTIAN ART—

A HISTORY OF ART IN ANCIENT EGYPT. By

G. PERROT and C. CHAMPOLLEON. Translated by WALTER ARMISTEAD. With over 600 Illustrations. 2 vols. Imperial 8vo, £2 2s.

ELLIS (A. B., Major 2nd West India Regiment)—

WEST AFRICAN ISLANDS. Demy 8vo. 14s.

THE HISTORY OF THE WEST INDIA REGIMENT. With Maps and Coloured Frontispiece and Title-page. Demy 8vo. 18s.

THE LAND OF FETISH. Demy 8vo. 12s.

ENGEL (CARL)—

A DESCRIPTIVE AND ILLUSTRATED CATALOGUE OF THE MUSICAL INSTRUMENTS IN THE SOUTH KENSINGTON MUSEUM, preceded by an Essay on the History of Musical Instruments. Second Edition. Royal 8vo, half-morocco, 12s.

MUSICAL INSTRUMENTS. With numerous Woodcuts. Large crown 8vo, cloth, 2s. 6d.

ESCOTT (T. H. S.)—

ENGLAND. ITS PEOPLE, POLITY, AND PURSUITS.

New and Revised Edition. Fifth Thousand. 8vo, 8s.

PILLARS OF THE EMPIRE: Short Biographical Sketches. 8vo, 12s. 6d.

EWALD (ALEXANDER CHARLES), F.S.A.—

REPRESENTATIVE STATESMEN: Political Studies. 2 vols. Large crown 8vo, £1 4s.

SIR ROBERT WALPOLE. A Political Biography, 1676-1743. Demy 8vo, 12s.

FANE (VIOLET)—

QUEEN OF THE FAIRIES (A Village Story), and other Poems. Crown 8vo, 6s.

ANTHONY BABINGTON: a Drama. Crown 8vo, 6s.

FEARNLEY (W.)—

LESSONS IN HORSE JUDGING, AND THE SUMMERING OF HUNTERS. With Illustrations. Crown 8vo, 4s.

FLEMING (GEORGE), F.R.C.S.—

ANIMAL PLAGUES: THEIR HISTORY, NATURE,
AND PREVENTION. 8vo, cloth, 19s.

PRACTICAL HORSE-SHOEING. With 37 Illustrations.
Fifth Edition, enlarged. 8vo, sewed, 2s.

RABIES AND HYDROPHOBIA: THEIR HISTORY,
NATURE, CAUSES, SYMPTOMS, AND PREVENTION. With 8 Illustrations. 8vo, cloth, 19s.

FORSTER (JOHN), M.P. for Berwick—

THE CHRONICLE OF JAMES I., KING OF ARAGON,
SURNAMED THE CONQUEROR. Written by Himself. Translated from
the Catalan by the late JOHN FORSTER, M.P. for Berwick. With an Historical
Introduction by DON PASCHAL DE GAYANGOS. 2 vols. Royal 8vo, 28s.

FORSTER (JOHN)—

THE LIFE OF CHARLES DICKENS. With Portraits
and other Illustrations. 3 vols. 8vo, cloth, £2 2s.

THE LIFE OF CHARLES DICKENS. Uniform with
the Illustrated Library Edition of Dickens's Works. 2 vols. Demy 8vo, £1 8s.

THE LIFE OF CHARLES DICKENS. Uniform with
the Library Edition. Post 8vo, 10s. 6d.

THE LIFE OF CHARLES DICKENS. Uniform with
the "C. D." Edition. With Numerous Illustrations. 2 vols. 7s.

THE LIFE OF CHARLES DICKENS. Uniform with
the Household Edition. With Illustrations by F. BARNARD. Crown 4to, cloth, 5s.

WALTER SAVAGE LANDOR: a Biography, 1775-1864.
With Portrait. A New and Revised Edition. Demy 8vo, 12s.

FORTNIGHTLY REVIEW—

FORTNIGHTLY REVIEW.—First Series, May, 1865, to
Dec. 1866. 2 vols. Cloth, 13s. each.

New Series, 1867 to 1872. In Half-yearly Volumes. Cloth,
13s. each.

From January, 1873, to the present time, in Half-yearly
Volumes. Cloth, 16s. each.

CONTENTS OF FORTNIGHTLY REVIEW. From
the commencement to the end of 1876. Sewed, 2s.

FORTNUM (C. D. E.)—

A DESCRIPTIVE AND ILLUSTRATED CATALOGUE OF THE BRONZES OF EUROPEAN ORIGIN in the SOUTH KENSINGTON MUSEUM, with an Introductory Notice. Royal 8vo, half-morocco, £1 10s.

A DESCRIPTIVE AND ILLUSTRATED CATALOGUE OF MAIOLICA, HISPANO-MORESCO, PERSIAN, DAMASCUS, AND RHODIAN WARES in the SOUTH KENSINGTON MUSEUM. Royal 8vo, half-morocco, £2.

MAIOLICA. With numerous Woodcuts. Large crown 8vo, cloth, ss. 6d.

BRONZES. With numerous Woodcuts. Large crown 8vo, cloth, ss. 6d.

FRANCATELLI (C. E.)—

ROYAL CONFECTIONER: English and Foreign. A Practical Treatise. Fourth Edition. With Illustrations. Crown 8vo, 5s.

FRANKS (A. W.)—

JAPANESE POTTERY. Being a Native Report. Numerous Illustrations and Marks. Large crown 8vo, cloth, ss. 6d.

GALLENGA (ANTONIO)—

EPISODES OF MY SECOND LIFE. 2 vols. Demy 8vo, 28s.

IBERIAN REMINISCENCES. Fifteen Years' Travelling Impressions of Spain and Portugal. With a Map. 2 vols. Demy 8vo, 32s.

GASNAULT (PAUL) and GARNIER (ED.)—

FRENCH POTTERY. With Illustrations. Crown 8vo, 3s.

GORDON (GENERAL)—

LETTERS FROM THE CRIMEA, THE DANUBE, AND ARMENIA. Edited by DEBBIEUX C. BOULGER. Second Edition. Crown 8vo, 5s.

GORST (J. E.), Q.C., M.P.—

An ELECTION MANUAL. Containing the Parliamentary Elections (Corrupt and Illegal Practices) Act, 1853, with Notes. Third Edition. Crown 8vo, ss. 6d.

GRESWELL (WILLIAM), M.A., F.R.C.I.—

OUR SOUTH AFRICAN EMPIRE. With Map. 2 vols.
Crown 8vo, 22s.

“GRIFFIN (SIR LEPEL HENRY), K.C.S.I.—

THE GREAT REPUBLIC. Second Edition. Crown 8vo,
4s. 6d.

GRIFFITHS (MAJOR ARTHUR), H.M. Inspector of Prisons—

CHRONICLES OF NEWGATE. Illustrated. New
Edition. Demy 8vo, 26s.

MEMORIALS OF MILLBANK: or, Chapters in Prison
History. With Illustrations by R. Goff and Author. New Edition. Demy 8vo,
12s.

HALL (SIDNEY)—

**A TRAVELLING ATLAS OF THE ENGLISH COUN-
TIES.** Fifty Maps, coloured. New Edition, including the Railways, corrected
up to the present date. Demy 8vo, in roan tuck, 12s. 6d.

HARDY (LADY DUFFUS)—

DOWN SOUTH. Demy 8vo. 14s.

THROUGH CITIES AND PRAIRIE LANDS. Sketches
of an American Tour. Demy 8vo, 14s.

HATTON (JOSEPH) and HARVEY (REV. M.)—

NEWFOUNDLAND. The Oldest British Colony. Its
History, Past and Present, and its Prospects in the Future. Illustrated from
Photographs and Sketches specially made for this work. Demy 8vo, 18s.

TO-DAY IN AMERICA. Studies for the Old World and
the New. 2 vols. Crown 8vo, 18s.

HAWKINS (FREDERICK)—

**ANNALS OF THE FRENCH STAGE: FROM ITS
ORIGIN TO THE DEATH OF RACINE.** 4 Portraits. 2 vols. Demy 8vo,
28s.

HILDEBRAND (HANS)—

**INDUSTRIAL ARTS OF SCANDINAVIA IN THE
PAGAN TIME.** Illustrated. Crown 8vo, 2s. 6d.

HILL (MISS G.)—

THE PLEASURES AND PROFITS OF OUR LITTLE
POULTRY FARM. Small 8vo, 3s.

HOLBEIN—

TWELVE HEADS AFTER HOLBEIN. Selected from
Drawings in Her Majesty's Collection at Windsor. Reproduced in Autotype, in
portfolio. £2 26s.

HOLLINGSHEAD (JOHN)—

FOOTLIGHTS. Crown 8vo. 7s. 6d.

HOVELACQUE (ABEL)—

THE SCIENCE OF LANGUAGE: LINGUISTICS,
PHILOLOGY, AND ETYMOLOGY. With Maps. Large crown 8vo, cloth, 3s.

HUMPHRIS (H. D.)—

PRINCIPLES OF PERSPECTIVE. Illustrated in a
Series of Examples. Oblong folio, half-bound, and Text 8vo, cloth, £2 1s.

INTERNATIONAL POLICY: Essay on the Foreign Relations
of England. By FREDERIC HARRISON, PROF. BRESLEY, WILLIAM CONGREVE,
and others. New Edition. Crown 8vo, 2s. 6d.

IRON (RALPH)—

THE STORY OF AN AFRICAN FARM. New Edition.
Crown 8vo, 5s.

JARRY (GENERAL)—

OUTPOST DUTY. Translated, with TREATISES ON
MILITARY RECONNAISSANCE AND ON ROAD-MAKING. By Major-
Genl. W. C. E. NAPIER. Third Edition. Crown 8vo, 5s.

JEANS (W. T.)—

CREATORS OF THE AGE OF STEEL. Memoirs of
Sir W. Siemens, Sir H. Bessemer, Sir J. Whitworth, Sir J. Brown, and other
Inventors. Second Edition. Crown 8vo, 7s. 6d.

JOHNSON (DR. SAMUEL)—

LIFE AND CONVERSATIONS OF DR. SAMUEL
JOHNSON. By A. MAIR. Crown 8vo, 10s. 6d.

JONES (CAPTAIN DOUGLAS), R.A.—

NOTES ON MILITARY LAW. Crown 8vo, 4s.

JONES COLLECTION (HANDBOOK OF THE) IN THE SOUTH KENSINGTON MUSEUM. Illustrated. Large crown 8vo, 2s. 6d.

KEMPIS (THOMAS A.)—

OF THE IMITATION OF CHRIST. Four Books.

Beautifully Illustrated Edition. Demy 8vo, 16s.

KENNARD (MRS. EDWARD)—

TWILIGHT TALES. Illustrated by EDITH ELLISON.

Crown 8vo, 7s. 6d.

KENT (CHARLES)—

HUMOUR AND PATHOS OF CHARLES DICKENS,
WITH ILLUSTRATIONS OF HIS MASTERY OF THE TERRIBLE
AND PICTURESQUE. Portrait. Crown 8vo, 6s.

KLACZKO (M. JULIAN)—

TWO CHANCELLORS; PRINCE GORTCHAKOF AND
PRINCE BISMARCK. Translated by MRS. TAIT. New and cheaper Edition, 6s.

LACORDAIRE'S JESUS CHRIST; GOD; AND GOD AND
MAN. Conférences delivered at Notre Dame in Paris. New Edition in 1 vol.
Crown 8vo, 6s.

LAING (S.)—

MODERN SCIENCE AND MODERN THOUGHT.

Third Edition. With a Supplementary Chapter on Gladstone's "Dawn of Creation
and Drummond's "Natural Law of the Spiritual World." Demy 8vo, 7s. 6d.

LAVELEYE (ÉMILE DE)—

THE ELEMENTS OF POLITICAL ECONOMY.

Translated by W. POLLARD, B.A., St. John's College, Oxford. Crown 8vo, 6s.

LANDOR'S WORKS. 8 vols. Demy 8vo, 14s. each volume.
All the Volumes can be supplied excepting Vol. II., which is out of print.

LECTURES ON AGRICULTURAL SCIENCE, AND OTHER
PROCEEDINGS OF THE INSTITUTE OF AGRICULTURE, SOUTH
KENSINGTON, 1883-4. Crown 8vo, sewed, 2s.

LEFÈVRE (ANDRÉ)—

PHILOSOPHY, Historical and Critical. Translated, with an Introduction, by A. W. KEANE, B.A. Large crown 8vo, 7s. 6d.

LESLIE (R. C.)—

A SEA PAINTER'S LOG. With Illustrations by the Author. Crown 8vo, *[In the Press.]*

LETOURNEAU (DR. CHARLES)—

SOCIOLOGY. Based upon Ethnology. Translated by HENRY M. TROLOPE. Large crown 8vo, 12s.

BIOLOGY. Translated by WILLIAM MACCALL. With Illustrations. Large crown 8vo, 6s.

LILLY (W. S.)—

SOME CHAPTERS ON EUROPEAN HISTORY. With an Introductory Dialogue on the Philosophy of History. 2 vols. Demy 8vo, 21s.

ANCIENT RELIGION AND MODERN THOUGHT. A New and Revised Edition. Demy 8vo, 12s.

LONG (JAMES)—

DAIRY FARMING. To which is added a Description of the Chief Continental Systems. With numerous Illustrations. Crown 8vo, 5s.

LOW (C. E.)—

SOLDIERS OF THE VICTORIAN AGE. 2 vols. Demy 8vo, £1 10s.

*LYTTON (ROBERT, EARL)—***POETICAL WORKS—**

FABLES IN SONG. 2 vols. Fcap 8vo, 12s.

THE WANDERER. Fcap 8vo, 6s.

POEMS, HISTORICAL AND CHARACTERISTIC. Fcap 6s.

MALLET (ROBERT)—

PRACTICAL MANUAL OF CHEMICAL ASSAYING, as applied to the Manufacture of Iron. By L. I. DE KOWINSKY and E. DWYZ. Edited, with notes, by ROBERT MALLET. Post 8vo, cloth, 6s.

MASKEIL (ALFRED)—

RUSSIAN ART AND ART OBJECTS IN RUSSIA.

A Handbook to the Reproduction of Goldsmiths' Work, &c., from that Country. Crown 8vo, 4s. 6d.

MASKELL (WILLIAM)—

A DESCRIPTION OF THE IVORIES, ANCIENT AND MEDÆVAL, in the SOUTH KENSINGTON MUSEUM, with a Preface. With numerous Photographs and Woodcuts. Royal 8vo, half-morocco, £1 1s.

IVORIES: ANCIENT AND MEDÆVAL. With numerous Woodcuts. Large crown 8vo, cloth, 2s. 6d.

HANDBOOK TO THE DYCE AND FORSTER COLLECTIONS. With Illustrations. Large crown 8vo, cloth, 2s. 6d.

MEREDITH (GEORGE)—

MODERN LOVE AND POEMS OF THE ENGLISH ROADSIDE, WITH POEMS AND BALLADS. Fcap. cloth, 6s.

GEORGE MEREDITH'S WORKS.

A New and Uniform Edition. In Six-Shilling Volumes. Crown 8vo:

DIANA OF THE CROSSWAYS. *(Ready.)*

EVAN HARRINGTON. *(Ready.)*

THE ORDEAL OF RICHARD FEVEREL. A History of a Father and Son. *(Ready.)*

THE ADVENTURES OF HARRY RICHMOND. *(Ready.)*

SANDRA BELLONI. Originally EMILIA IN ENGLAND. *(Ready.)*

VITTORIA. *(Ready.)*

RHODA FLEMING. *(Ready.)*

BEAUCHAMP'S CAREER.

THE EGOIST.

MERIVALE (HERMAN CHARLES)—

BINKO'S BLUES. A Tale for Children of all Growths. Illustrated by EDGAR GIBBONS. Small crown 8vo, 3s.

THE WHITE PILGRIM, and other Poems. Crown 8vo, 9s.

FAUCIT OF BALLIOL. Crown 8vo, 6s.

MILITARY BIOGRAPHIES—

FREDERICK THE GREAT. By COL. C. B. BRACKENBURY;
with Maps and Portrait. Large crown 8vo, 4s.

LOUDON. A Sketch of the Military Life of Gideon
Ernest, Freiherr von Loudon, sometime Generalissimo of the Austrian Forces.
By COL. G. B. MALLESON, C.S.I. With Portrait and Maps. Large crown
8vo, 4s.

TURENNE. By H. M. HOZIER. With Portrait and Two
Maps. Large crown 8vo, 4s.

**PARLIAMENTARY GENERALS OF THE GREAT
CIVIL WAR.** By MAJOR WALFORD, R.A. With Maps. Crown 8vo, 4s.

MOLESWORTH (W. NASSAU)—

**HISTORY OF ENGLAND FROM THE YEAR 1830
TO THE RESIGNATION OF THE GLADSTONE MINISTRY, 1874.**
Twelfth Thousand. 3 vols. Crown 8vo, 16s.

ABRIDGED EDITION. Large crown, 7s. 6d.

MOLTKE (FIELD-MARSHAL COUNT VON)—

POLAND: AN HISTORICAL SKETCH. An Authorised
Translation, with Biographical Notice by E. S. BUCHANAN. Crown 8vo, 2s. 6d.

MORLEY (HENRY)—

TABLES OF ENGLISH LITERATURE. Containing
20 Charts. Second Edition, with Index. Royal 4to, cloth, 12s.
In Three Parts. Parts I. and II., containing Three Charts, each 1s. 6d.
Part III. in Sections, 1, 2, and 3, 1s. 6d. each; 4 and 4 together, 3s.
. The Charts sold separately.

MORLEY (JOHN)—

**LIFE AND CORRESPONDENCE OF RICHARD
COLDEN.** Fourth Thousand. 2 vols. Demy 8vo £1 12s.

Popular Edition. With Portrait. 4to, sewed, 1s. Bound
in cloth, 2s.

MUNTZ (EUGÈNE), From the French of—

RAPHAEL: HIS LIFE, WORKS, AND TIMES.
Edited by W. ARMSTRONG. With 125 Wood Engravings and 41 Full-page Plates.
Imperial 8vo, 36s.

MURPHY (J. M.)—

RAMBLES IN NORTH-WEST AMERICA. With
Frontispiece and Map. 8vo, 16s.

URRAY (ANDREW), F.L.S.—

ECONOMIC ENTOMOLOGY. APTEA. With nume-
rous Illustrations. Large crown 8vo, 7s. 6d.

NAPIER (MAJ.-GEN. W. C. E.)—

TRANSLATION OF GEN. JARRY'S OUTPOST DUTY.

With TREATISES ON MILITARY RECONNAISSANCE AND ON ROAD-MAKING. Third Edition. Crown 8vo, 5s.

NAPOLEON. A Selection from the Letters and Despatches of the First Napoleon. With Explanatory Notes by Captain the Hon. D. BINGHAM. 3 vols. Demy 8vo, £2 2s.

NECKER (MADAME)—

THE SALON OF MADAME NECKER. By VICOMTE

D'HACSONVILLE. Translated by H. M. TROLLOPE. 2 vols. Crown 8vo 18s.

NESBITT (ALEXANDER)—

GLASS. Illustrated. Crown 8vo, cloth, 2s. 6d.

NEVINSON (HENRY)—

A SKETCH OF HERDER AND HIS TIMES. With

a Portrait. Demy 8vo, 14s.

NEWTON (E. TULLEY), F.G.S.—

THE TYPICAL PARTS IN THE SKELETONS OF

A CAT, DUCK, AND CODFISH, being a Catalogue with Comparative Description arranged in a Tabular form. Demy 8vo, cloth, 3s.

NORMAN (C. B.), late of the 90th Light Infantry and Bengal Staff Corps—

TONKIN; OR, FRANCE IN THE FAR EAST. With

Maps. Demy 8vo, 14s.

O'GRADY (STANDISH)—

TORYISM AND THE TORY DEMOCRACY. Crown

8vo, 5s.

OLIVER (PROFESSOR), F.R.S., &c.—

ILLUSTRATIONS OF THE PRINCIPAL NATURAL

ORDERS OF THE VEGETABLE KINGDOM, PREPARED FOR THE SCIENCE AND ART DEPARTMENT, SOUTH KENSINGTON. With 109 Plates. Oblong 8vo, plain, 16s.; coloured, £1 6s.

OXENHAM (REV. H. N.)—

MEMOIR OF LIEUTENANT RUDOLPH DE LISLE,
R.N., OF THE NAVAL BRIGADE. *[In the Press.]*

SHORT STUDIES, ETHICAL AND RELIGIOUS.

Demy 8vo. 12s.

SHORT STUDIES IN ECCLESIASTICAL HISTORY
AND BIOGRAPHY. Demy 8vo, 12s.

PERROT (GEORGES) and CHIPIEZ (CHARLES)—

A HISTORY OF ANCIENT ART IN PHENICIA AND ITS DEPENDENCIES. Translated from the French by WALTER ARMSTRONG, B.A. Oxon. Containing 644 Illustrations in the text, and 20 Steel and Coloured Plates. 2 vols. Imperial 8vo, 42s.

A HISTORY OF ART IN CHALDÆA AND ASSYRIA. Translated by WALTER ARMSTRONG, B.A. Oxon. With 450 Illustrations. 2 vols. Imperial 8vo, 42s.

A HISTORY OF ART IN ANCIENT EGYPT. Translated from the French by W. ARMSTRONG, B.A. Oxon. With over 600 Illustrations. 2 vols. Imperial 8vo, 42s.

PIASSETSKY (P.)—

RUSSIAN TRAVELLERS IN MONGOLIA AND CHINA. Translated by GORDON-CUMMING. With 75 Illustrations. 2 vols. Crown 8vo, 24s.

PITT TAYLOR (FRANK)—

THE CANTERBURY TALES. Selections from the Tales of GEOFFREY CHAUCER rendered into Modern English, with close adherence to the language of the Poet. With Frontispiece. Crown 8vo, 6s.

POLLEN (J. H.)—

ANCIENT AND MODERN FURNITURE AND WOODWORK IN THE SOUTH KENSINGTON MUSEUM. With an Introduction, and Illustrated with numerous Coloured Photographs and Woodcuts. Royal 8vo, half-morocco, £1 1s.

GOLD AND SILVER SMITH'S WORK. With numerous Woodcuts. Large crown 8vo, cloth, 2s. 6d.

ANCIENT AND MODERN FURNITURE AND WOODWORK. With numerous Woodcuts. Large crown 8vo, cloth, 2s. 6d.

POYNTER (E. J.), R.A.—

TEN LECTURES ON ART. Third Edition. *In the Press.*

PRAED (MRS. CAMPBELL)—

AUSTRALIAN LIFE: Black and White. With Illustration. Crown 8vo, 8s.

AN AUSTRALIAN HEROINE. Crown 8vo, 6s.

MOLOCH. A Story of Sacrifice. Crown 8vo, 6s.

FRINSEP (VAL), A.R.A.—

IMPERIAL INDIA. Containing numerous Illustrations and Maps. Second Edition. Demy 8vo, £1 1s.

PYTCHLEY COOKERY BOOK—

THE PYTCHLEY BOOK OF REFINED COOKERY AND BILLS OF FARE. By MAJOR L——. Second Edition. Large crown 8vo, 8s.

RADICAL PROGRAMME, THE. From the *Fortnightly Review*, with additions. With a Preface by the RIGHT HON. J. CHAMBERLAIN, M.P. Thirteenth Thousand. Crown 8vo, 2s. 6d.

RAMSDEN (LADY GWENDOLEN)—

A BIRTHDAY BOOK. Illustrated. Containing 46 Illustrations from Original Drawings, and numerous other Illustrations. Royal 8vo, 21s.

REDGRAVE (GILBERT)—

OUTLINES OF HISTORIC ORNAMENT. Translated from the German. Edited by GILBERT REDGRAVE. With numerous Illustrations. Crown 8vo, 4s.

REDGRAVE (GILBERT R.)—

MANUAL OF DESIGN, compiled from the Writings and Addresses of RICHARD REDGRAVE, R.A. With Woodcuts. Large crown 8vo, cloth, 2s. 6d.

REDGRAVE (RICHARD)—

ELEMENTARY MANUAL OF COLOUR, with a Catechism on Colour. 24mo, cloth, 9d.

REDGRAVE (SAMUEL)—

A DESCRIPTIVE CATALOGUE OF THE HISTORICAL COLLECTION OF WATER-COLOUR PAINTINGS IN THE SOUTH KENSINGTON MUSEUM. With numerous Chromo-lithographs and other Illustrations. Royal 8vo, £1 1s.

RENAN (ERNEST)—

RECOLLECTIONS OF MY YOUTH. Translated from the original French, and revised by WILLIAM RENAN. Crown 8vo, 8s.

RIANO (JUAN F.)—

THE INDUSTRIAL ARTS IN SPAIN. Illustrated. Large crown 8vo, cloth, 4s.

ROBINSON (JAMES F.)—

BRITISH BEE FARMING. Its Profits and Pleasures. Large crown 8vo, 5s.

ROBINSON (J. C.)—

ITALIAN SCULPTURE OF THE MIDDLE AGES AND PERIOD OF THE REVIVAL OF ART. With 20 Engravings. Royal 8vo, cloth, 7s. 6d.

ROBSON (GEORGE)—

ELEMENTARY BUILDING CONSTRUCTION. Illustrated by a Design for an Entrance Lodge and Gate. 15 Plates. Oblong folio, sewed, 8s.

ROBSON (REV. J. H.), M.A., LL.M.—

AN ELEMENTARY TREATISE ON ALGEBRA. Post 8vo, 6s.

ROCK (THE VERY REV. CANON), D.D.—

ON TEXTILE FABRICS. A Descriptive and Illustrated Catalogue of the Collection of Church Vestments, Dresses, Silk Stuff, Needlework, and Tapestries in the South Kensington Museum. Royal 8vo, half-morocco, £1 11s. 6d.

TEXTILE FABRICS. With numerous Woodcuts. Crown 8vo, cloth, 2s. 6d.

ROLAND (ARTHUR).—

FARMING FOR PLEASURE AND PROFIT. Edited by WILLIAM ARLETT. 8 vols. Crown 8vo, 5s. each.

DAIRY-FARMING, MANAGEMENT OF COWS, &c.

POULTRY-KEEPING.

TREE-PLANTING, FOR ORNAMENTATION OR PROFIT.

STOCK-KEEPING AND CATTLE-REARING.

DRAINAGE OF LAND, IRRIGATION, MANURES, &c.

ROOT-GROWING, HOPS, &c.

MANAGEMENT OF GRASS LANDS, LAYING DOWN GRASS, ARTIFICIAL GRASSES, &c.

MARKET GARDENING. HUSBANDRY FOR FARMERS AND GENERAL CULTIVATORS.

RUSDEN (G. W.), for many years Clerk of the Parliament in Victoria—

A HISTORY OF AUSTRALIA. With a Coloured Map. 3 vols. Demy 8vo, 50s.

A HISTORY OF NEW ZEALAND. With Maps. 3 vols. Demy 8vo, 50s.

SCOTT (A. DE C., MAJOR-GENERAL, late Royal Engineers).—

LONDON WATER : a Review of the Present Condition and Suggested Improvements of the Metropolitan Water Supply. Crown 8vo, sewed, 2s.

SCOTT-STEVENSON (MRS.).—

ON SUMMER SEAS. Including the Mediterranean, the Ægean, the Ionian, and the Euxine, and a voyage down the Danube. With a Map. Demy 8vo, 16s.

OUR HOME IN CYPRUS. With a Map and Illustrations. Third Edition. Demy 8vo, 14s.

OUR RIDE THROUGH ASIA MINOR. With Map. Demy 8vo, 12s.

SHEPHERD (MAJOR), R.E.—

PRAIRIE EXPERIENCES IN HANDLING CATTLE AND SHEEP. With Illustrations and Map. Demy 8vo, 10s. 6d.

SHIRREFF (MISS).—

HOME EDUCATION IN RELATION TO THE KINDERGARTEN. Two Lectures. Crown 8vo, 1s. 6d.

SIMMONDS (T. L.)—

ANIMAL PRODUCTS: their Preparation, Commercial Uses, and Value. With numerous Illustrations. Large crown 8vo, 7s. 6d.

SINNETT (A. P.)—

ESOTERIC BUDDHISM. Annotated and enlarged by the Author. Fifth Edition. Crown 8vo, 6s.

KARMA. A Novel. New Edition. Crown 8vo, 3s. 6d.

SINNETT (MRS.)—

THE PURPOSE OF THEOSOPHY. Crown 8vo, 3s.

SMART (HAWLEY)—

TIE AND TRICK. Crown 8vo, 6s.

SMITH (MAJOR R. MURDOCK), R.E.—

PERSIAN ART. Second Edition, with additional Illustrations. Large crown 8vo, 3s.

STORY (W. W.)—

ROBA DI ROMA. Seventh Edition, with Additions and Portrait. Crown 8vo, cloth, 10s. 6d.

CASTLE ST. ANGELO. With Illustrations. Crown 8vo, 10s. 6d.

SUTCLIFFE (JOHN)—

THE SCULPTOR AND ART STUDENT'S GUIDE

to the Proportions of the Human Form, with Measurements in feet and inches of Full-Crown Figures of Both Sexes and of Various Ages. By Dr. G. SCHASOW, Member of the Academies, Stockholm, Dresden, Rome, &c. &c. Translated by J. J. WRIGHT. Plates reproduced by J. SUTCLIFFE. Oblong folio, 31s. 6d.

TAINE (H. A.)—

NOTES ON ENGLAND. Translated, with Introduction, by W. FRANK RAE. Eighth Edition. With Portrait. Crown 8vo, 3s.

TANNER (PROFESSOR), F.C.S.—

HOLT CASTLE; or, Threefold Interest in Land. Crown 8vo, 4s. 6d.

JACK'S EDUCATION; OR, HOW HE LEARNT FARMING. Second Edition. Crown 8vo, 3s. 6d.

TEMPLE (SIR RICHARD), BART., M.P., G.C.S.I.—

COSMOPOLITAN ESSAYS. With Maps. Demy 8vo.
(in the Press.)

TOPINARD (DR. PAUL).—

ANTHROPOLOGY. With a Preface by Professor PAUL BROCA. With numerous illustrations. Large crown 8vo, 7s. 6d.

TOVEY (LIEUT.-COL., R.E.).—

MARTIAL LAW AND CUSTOM OF WAR; or, Military Law and Jurisdiction in Troubled Times. Crown 8vo, 6s.

TRAILL (H. D.).—

THE NEW LUCIAN. Being a Series of Dialogues of the Dead. Demy 8vo, 12s.

TROLLOPE (ANTHONY).—

AYALA'S ANGEL. Crown 8vo. 6s.

LIFE OF CICERO. 2 vols. 8vo. £1 4s.

THE CHRONICLES OF BARSETSHIRE. A Uniform Edition, in 3 vols., large crown 8vo, handsomely printed, each vol. containing Frontispiece. 6s. each.

THE WARDEN and BAR-
CHESTER TOWERS. 2 vols.
DR. THORNE.
FRAMLEY PARSONAGE.

THE SMALL HOUSE AT
ALLINGTON. 2 vols.
LAST CHRONICLE OF
BARSET. 2 vols.

UNIVERSAL.—

UNIVERSAL CATALOGUE OF BOOKS ON ART.

Compiled for the use of the National Art Library, and the Schools of Art in the United Kingdom. In 2 vols. Crown 4to, half-morocco, £2 2s.

Supplemental Volume to Ditto. Crown 8vo, 8s. nett.

VERON (EUGENE).—

ÆSTHETICS. Translated by W. H. ARMSTRONG. Large crown 8vo, 7s. 6d.

WALE (REV. HENRY JOHN), M.A.—

MY GRANDFATHER'S POCKET BOOK, from 1701 to 1796. Author of "Sword and Surplice." Demy 8vo, 12s.

WALKER (MRS.).—

EASTERN LIFE AND SCENERY, with Excursions to Asia Minor, Mysiæ, Crete, and Roumania. 2 vols., crown 8vo.

[In the Press.]

WESTWOOD (J. O.), M.A., F.L.S., &c.—

CATALOGUE OF THE FICTILE IVORIES IN THE SOUTH KENSINGTON MUSEUM. With an Account of the Continental Collections of Classical and Mediæval Ivories. Royal 8vo, half-morocco, £1 4s.

WHIST HANDBOOKS. By AQUARIUS—

THE HANDS AT WHIST. 32mo, cloth gilt, 1s.

EASY WHIST. 32mo, cloth gilt, 1s.

ADVANCED WHIST. 32mo, cloth gilt, 1s.

WHITE (WALTER)—

A MONTH IN YORKSHIRE. With a Map. Fifth Edition. Post 8vo, 4s.

A LONDONER'S WALK TO THE LAND'S END, AND A TRIP TO THE SCILLY ISLES. With 4 Maps. Third Edition. Post 8vo, 4s.

WICKEN (H. F.)—

THE KINGSWOOD COOKERY BOOK. Crown 8vo, 2s.

WILL-O'-THE-WISPS, THE. Translated from the German of Marie Petersen by CHARLOTTE J. HART. With Illustrations. Crown 8vo, 7s. 6d.

WORNUM (R. N.)—

ANALYSIS OF ORNAMENT: THE CHARACTERISTICS OF STYLES. An Introduction to the History of Ornamental Art. With many Illustrations. Ninth Edition. Royal 8vo, cloth, 8s.

WORSAAE (J. J. A.)—

INDUSTRIAL ARTS OF DENMARK, FROM THE EARLIEST TIMES TO THE DANISH CONQUEST OF ENGLAND. With Maps and Illustrations. Crown 8vo, 3s. 6d.

YEO (DR. J. BURNEY)—

CLIMATE AND HEALTH RESORTS. New Edition. Crown 8vo, 10s. 6d.

YOUNGE (C. D.)—

PARALLEL LIVES OF ANCIENT AND MODERN HEROES. New Edition. 12mo, cloth, 4s. 6d.

SOUTH KENSINGTON MUSEUM

DESCRIPTIVE AND ILLUSTRATED CATALOGUES.

*Royal 8vo, half-bound.*BRONZES OF EUROPEAN ORIGIN. By C. D. E. FORTNUM.
*£1 70s.*DYCE'S COLLECTION OF PRINTED BOOKS AND
MANUSCRIPTS. 2 vols. *48s.*DYCE'S COLLECTION OF PAINTINGS, ENGRAVINGS,
*8vo, 6s. 6d.*FURNITURE AND WOODWORK, ANCIENT AND
MODERN. By J. H. POLLEN. *£1 1s.*GLASS VESSELS. By A. NESBITT. *18s.*GOLD AND SILVER SMITH'S WORK. By J. G. POLLEN.
*£1 6s.*IVORIES, ANCIENT AND MÆDÆVAL. By W. MASKELL.
*21s.*IVORIES, FICTILE. By J. O. WESTWOOD. *£1 4s.*MAIOLICA, HISPANO-MORESCO, PERSIAN, DAMAS-
CUS AND RHODIAN WARES. By C. D. E. FORTNUM. *£2.*MUSICAL INSTRUMENTS. By C. ENGEL. *12s.*SCULPTURE, ITALIAN SCULPTURE OF THE MIDDLE
AGES. By J. C. HANCOCK. *Cloth, 7s. 6d.*SWISS COINS. By R. S. POOLE. *£2 10s.*TEXTILE FABRICS. By Rev. D. ROCK. *£1 11s. 6d.*WATER-COLOUR PAINTING. By S. REDGRAVE. *£1 1s.*UNIVERSAL CATALOGUE OF BOOKS ON ART. 2 vols.
*Small 4to, £1 1s. each.*UNIVERSAL CATALOGUE OF BOOKS ON ART. Supple-
mentary vol. *8s. net.*

SOUTH KENSINGTON MUSEUM SCIENCE AND ART HANDBOOKS.

Handsomely printed in large crown 8vo.

Published for the Committee of the Council on Education.

THE ART OF THE SARACENS IN EGYPT. By STANLEY
LANK POOLE. With Illustrations. *In the Press.*

ENGLISH PORCELAIN. By A. H. CHURCH, M.A. With
numerous Illustrations. 3s.

RUSSIAN ART AND ART OBJECTS IN RUSSIA. By
ALFRED MASKELL. With Illustrations. 4s. 6d.

FRENCH POTTERY. By PAUL GASNAULT and EDOUARD
GARNIER. With Illustrations and marks. 3s.

ENGLISH EARTHENWARE: A Handbook to the Wares
made in England during the 17th and 18th Centuries. By PROF. CHURCH. With
Illustrations. 3s.

INDUSTRIAL ARTS OF DENMARK. From the Earliest
Times to the Danish Conquest of England. By J. J. A. WORSAAE, Hon. F.S.A.,
&c. &c. With Illustrations. 3s. 6d.

INDUSTRIAL ARTS OF SCANDINAVIA IN THE PAGAN
TIME. By HANS HILDEBRAND, Royal Antiquary of Sweden. With Illustrations.
2s. 6d.

PRECIOUS STONES. By PROFESSOR CHURCH. With Illus-
trations. 2s. 6d.

INDUSTRIAL ARTS OF INDIA. By Sir GEORGE C. M.
BIRWOOD, C.S.I. With Map and Illustrations. Demy 8vo, 14s.

HANDBOOK TO THE DYCE AND FORSTER COLLEC-
TIONS. By W. MASKELL. With Illustrations. 2s. 6d.

INDUSTRIAL ARTS IN SPAIN. By JUAN F. RIANO.
With Illustrations. 4s.

GLASS. By ALEXANDER NESBITT. With Illustrations. 2s. 6d.

GOLD AND SILVER SMITH'S WORK. By JOHN HUNGER-
FORD FULLER. With Illustrations. 2s. 6d.

TAPESTRY. By ALFRED CHAMPEAUX. With Illustrations. 2s. 6d.

BRONZES. By C. DRURY E. FORTNUM, F.S.A. With Illustrations.
2s. 6d.

PLAIN WORDS ABOUT WATER. By A. H. CHURCH, M.A.
Oxon. With Illustrations. Sewed, 6d.

SOUTH KENSINGTON MUSEUM SCIENCE & ART HANDBOOKS—*Continued.*

ANIMAL PRODUCTS: their Preparation, Commercial Uses, and Value. By T. L. SUMMONDS. With Illustrations. 7s. 6d.

FOOD: A Short Account of the Sources, Constituents, and Uses of Food. By A. H. CHURCH, M.A. OXON. 3s.

ECONOMIC ENTOMOLOGY. By ANDREW MURRAY, F.L.S. *APTERA.* With Illustrations. 7s. 6d.

JAPANESE POTTERY. Being a Native Report. Edited by A. W. FRANKS. With Illustrations and Marks. 2s. 6d.

HANDBOOK TO THE SPECIAL LOAN COLLECTION of Scientific Apparatus. 3s.

INDUSTRIAL ARTS: Historical Sketches. With Illustrations. 3s.

TEXTILE FABRICS. By the Very Rev. DANIEL ROCK, D.D. With Illustrations. 2s. 6d.

JONES COLLECTION IN THE SOUTH KENSINGTON MUSEUM. With Portrait and Illustrations. 2s. 6d.

COLLEGE AND CORPORATION PLATE. By WILFRED CHIFFS. With Illustrations. Cloth, 2s. 6d.

IVORIES: ANCIENT AND MEDÆVAL. By WILLIAM MASKELL. With Illustrations. 2s. 6d.

ANCIENT AND MODERN FURNITURE AND WOODWORK. By JOHN HUNGERFORD POLLEN. With Illustrations. 2s. 6d.

MAIOLICA. By C. DRURY E. FORTNUM, F.S.A. With Illustrations. 2s. 6d.

THE CHEMISTRY OF FOODS. With Microscopic Illustrations. By JAMES BELL, Principal of the Somerset House Laboratory.
Part I.—Tea, Coffee, Cocoa, Sugar, &c. 2s. 6d.
Part II.—Milk, Butter, Cereals, Prepared Starches, &c. 5s.

MUSICAL INSTRUMENTS. By CARL ENGEL. With Illustrations. 2s. 6d.

MANUAL OF DESIGN, compiled from the Writings and Addresses of RICHARD REDGRAVE, R.A. By GILBERT E. REDGRAVE. With Illustrations. 2s. 6d.

PERSIAN ART. By MAJOR R. MURDOCK SMITH, R.E. Second Edition, with additional Illustrations. 2s.

CARLYLE'S (THOMAS) WORKS.

THE ASHBURTON EDITION.

An entirely New Edition of the Writings of Mr. CARLYLE, to be completed in Seventeen Volumes, demy 8vo, is now publishing. For Particulars see page 2.

CHEAP AND UNIFORM EDITION.

23 vols., Crown 8vo, cloth, £7 5s.

THE FRENCH REVOLUTION :

A History. 2 vols., 12s.

OLIVER CROMWELL'S LETTERS AND SPEECHES, with Elucidations, &c. 3 vols., 18s.

LIVES OF SCHILLER AND JOHN STERLING. 1 vol., 6s.

CRITICAL AND MISCELLANEOUS ESSAYS. 4 vols., £1 4s.

SARTOR RESARTUS AND LECTURES ON HEROES. 1 vol., 6s.

LATTER-DAY PAMPHLETS.

1 vol., 6s.

CHARTISM AND PAST AND PRESENT. 1 vol., 6s.

TRANSLATIONS FROM THE GERMAN OF MUSÆUS, TIECK, AND RICHTER. 1 vol., 6s.

WILHELM MEISTER, by Goethe. A Translation. 2 vols., 12s.

HISTORY OF FRIEDRICH THE SECOND, called Frederick the Great. 2 vols., £2 9s.

LIBRARY EDITION COMPLETE.

Handsomely printed in 34 vols., demy 8vo, cloth, £15 3s.

SARTOR RESARTUS. With a Portrait, 7s. 6d.

THE FRENCH REVOLUTION. A History. 3 vols., each 9s.

LIFE OF FREDERICK SCHILLER AND EXAMINATION OF HIS WORKS. With Supplement of 1872. Portrait and Plates, 9s.

CRITICAL AND MISCELLANEOUS ESSAYS. With Portrait. 4 vols., each 9s.

ON HEROES, HERO WORSHIP, AND THE HEROIC IN HISTORY. 7s. 6d.

PAST AND PRESENT. 9s.

CARLYLE'S (THOMAS) WORKS.—LIBRARY EDITION—*Continued.*

OLIVER CROMWELL'S LETTERS AND SPEECHES. With

Portraits. 5 vols., each 9s.

LATTER-DAY PAMPHLETS. 9s.

LIFE OF JOHN STERLING. With Portrait, 9s.

HISTORY OF FREDERICK THE SECOND. 10 vols.,
each 9s.

TRANSLATIONS FROM THE GERMAN. 3 vols., each 9s.

EARLY KINGS OF NORWAY; ESSAY ON THE POR-
TRAITS OF JOHN KNOX; AND GENERAL INDEX. With Portrait
Illustrations. 8vo, cloth, 9s.

PEOPLE'S EDITION.

37 vols., small 8vo, 2s. each vol.; or in sets, 37 vols. in 19, cloth gilt, £3 14s.

SARTOR RESARTUS.

FRENCH REVOLUTION. 3 vols.

LIFE OF JOHN STERLING.

OLIVER CROMWELL'S LET-
TERS AND SPEECHES. 5 vols.

ON HEROES AND HERO
WORSHIP.

PAST AND PRESENT.

CRITICAL AND MISCELLA-
NEOUS ESSAYS. 7 vols.

LATTER-DAY PAMPHLETS.

LIFE OF SCHILLER.

FREDERICK THE GREAT.
10 vols.

WILHELM MEISTER. 3 vols.

TRANSLATIONS FROM MU-
SEUS, TIECK, AND RICHTER.
2 vols.

THE EARLY KINGS OF NOR-
WAY; Essay on the Portraits of Knox;
and General Index.

SARTOR RESARTUS. Cheap Edition, crown 8vo, sewed, 1s.

SIXPENNY EDITION.

4to, sewed.

SARTOR RESARTUS. Eightieth Thousand.

HEROES AND HERO WORSHIP.

ESSAYS: BURNS, JOHNSON, SCOTT, THE DIAMOND NECKLACE.

The above in 1 vol., cloth, 2s. 6d.

DICKENS'S (CHARLES) WORKS.

ORIGINAL EDITIONS.

In demy 8vo.

- THE MYSTERY OF EDWIN DROOD. With Illustrations by S. L. Fildes, and a Portrait engraved by Baker. Cloth, 7s. 6d.
- OUR MUTUAL FRIEND. With Forty Illustrations by Marcus Stone. Cloth, £1 2s.
- THE PICKWICK PAPERS. With Forty-three Illustrations by Seymour and Phiz. Cloth, £1 1s.
- NICHOLAS NICKLEBY. With Forty Illustrations by Phiz. Cloth, £1 1s.
- SKETCHES BY "BOZ." With Forty Illustrations by George Cruikshank. Cloth, £1 1s.
- MARTIN CHUZZLEWIT. With Forty Illustrations by Phiz. Cloth, £1 1s.
- DOMBEY AND SON. With Forty Illustrations by Phiz. Cloth, £1 1s.
- DAVID COPPERFIELD. With Forty Illustrations by Phiz. Cloth, £1 1s.
- BLEAK HOUSE. With Forty Illustrations by Phiz. Cloth, £1 1s.
- LITTLE DORRIT. With Forty Illustrations by Phiz. Cloth, £1 1s.
- THE OLD CURIOSITY SHOP. With Seventy-five Illustrations by George Cattermole and H. K. Browne. A New Edition. Uniform with the other volumes, £1 1s.
- BARNABY RUDGE: a Tale of the Riots of 'Eighty. With Seventy-eight Illustrations by George Cattermole and H. K. Browne. Uniform with the other volumes, £1 1s.
- CHRISTMAS BOOKS: Containing—The Christmas Carol; The Cricket on the Hearth; The Chimes; The Battle of Life; The Haunted House. With all the original Illustrations. Cloth, 12s.
- OLIVER TWIST and TALE OF TWO CITIES. In one volume. Cloth, £1 1s.
- OLIVER TWIST. Separately. With Twenty-four Illustrations by George Cruikshank. Cloth, 12s.
- A TALE OF TWO CITIES. Separately. With Sixteen Illustrations by Phiz. Cloth, 9s.

. *The remainder of Dickens's Works were not originally printed in demy 8vo.*

DICKENS'S (CHARLES) WORKS.

LIBRARY EDITION.

In post 8vo. With the Original Illustrations, 30 vols., cloth, £12.

PICKWICK PAPERS	43	Illustrs., 2 vols.	16	0
NICHOLAS NICKLEBY	39	2 vols.	16	0
MARTIN CHUZZLEWIT	40	2 vols.	16	0
OLD CURIOSITY SHOP & REPRINTED PIECES	36	2 vols.	16	0
BARNABY RUDGE and HARD TIMES	36	2 vols.	16	0
BLEAK HOUSE	40	2 vols.	16	0
LITTLE DORRIT	40	2 vols.	16	0
DOMBEY AND SON	38	2 vols.	16	0
DAVID COPPERFIELD	38	2 vols.	16	0
OUR MUTUAL FRIEND	40	2 vols.	16	0
SKETCHES BY "BOZ"	39	1 vol.	8	0
OLIVER TWIST	34	1 vol.	8	0
CHRISTMAS BOOKS	17	1 vol.	8	0
A TALE OF TWO CITIES	16	1 vol.	8	0
GREAT EXPECTATIONS	8	1 vol.	8	0
PICTURES FROM ITALY & AMERICAN NOTES	8	1 vol.	8	0
UNCOMMERCIAL TRAVELLER	8	1 vol.	8	0
CHILD'S HISTORY OF ENGLAND	8	1 vol.	8	0
EDWIN DROOD and MISCELLANIES	12	1 vol.	8	0
CHRISTMAS STORIES from "Household Words," &c., 14	1	1 vol.	8	0
THE LIFE OF CHARLES DICKENS. By JOHN FORSTER. With Illustrations. Uniform with this Edition. 10s. 6d.				

A NEW EDITION OF ABOVE, WITH THE ORIGINAL ILLUSTRATIONS, IN CROWN 8vo, 30 VOLS. IN SETS ONLY.

DICKENS'S (CHARLES) WORKS.

THE "CHARLES DICKENS" EDITION.

In Crown 8vo. In 21 vols., cloth, with Illustrations, £3 16s.

									2. d.
PICKWICK PAPERS	...	...	...	...	...	8	Illustrations	...	4 0
MARTIN CHUZZLEWIT	...	...	...	...	...	8	..	...	4 0
DOMBEY AND SON	...	...	...	...	...	8	..	...	4 0
NICHOLAS NICKLEBY	...	...	...	...	...	8	..	...	4 0
DAVID COPPERFIELD	...	...	...	...	...	8	..	...	4 0
BLEAK HOUSE	...	...	...	...	...	8	..	...	4 0
LITTLE DORRIT	...	...	...	...	...	8	..	...	4 0
OUR MUTUAL FRIEND...	...	...	...	...	...	8	..	...	4 0
BARNABY RUDGE...	...	...	...	...	...	8	..	...	3 6
OLD CURIOSITY SHOP	...	...	...	...	...	8	..	...	3 6
A CHILD'S HISTORY OF ENGLAND	...	...	...	...	...	4	..	...	3 6
EDWIN DROOD and OTHER STORIES	...	...	...	...	...	8	..	...	3 6
CHRISTMAS STORIES, from "Household Words"	...	...	...	...	...	8	..	...	3 6
SKETCHES BY "BOZ"	...	...	...	...	...	8	..	...	3 6
AMERICAN NOTES and REPRINTED PIECES	...	...	...	...	...	8	..	...	3 6
CHRISTMAS BOOKS	...	...	...	...	...	8	..	...	3 6
OLIVER TWIST	...	...	...	...	...	8	..	...	3 6
GREAT EXPECTATIONS...	...	...	...	...	...	8	..	...	3 6
TALE OF TWO CITIES	...	...	...	...	...	8	..	...	3 0
HARD TIMES and PICTURES FROM ITALY	...	...	...	...	...	8	..	...	3 0
UNCOMMERCIAL TRAVELLER	...	...	...	...	...	4	..	...	3 0
THE LIFE OF CHARLES DICKENS, Numerous Illustrations.	2 vols.	7	0						
THE LETTERS OF CHARLES DICKENS.	2 vols.	8	0						

DICKENS'S (CHARLES) WORKS.

THE ILLUSTRATED LIBRARY EDITION.

Complete in 30 Volumes. Demy 8vo, 10s. each; or set, £15.

This Edition is printed on a finer paper and in a larger type than has been employed in any previous edition. The type has been cast especially for it, and the page is of a size to admit of the introduction of all the original illustrations.

No such attractive issue has been made of the writings of Mr. Dickens, which, various as have been the forms of publication adapted to the demands of an ever widely-increasing popularity, have never yet been worthily presented in a really handsome library form.

The collection comprises all the minor writings it was Mr. Dickens's wish to preserve.

SKETCHES BY "BOZ." With 40 Illustrations by George Cruikshank.

PICKWICK PAPERS. 2 vols. With 42 Illustrations by Phiz.

OLIVER TWIST. With 24 Illustrations by Cruikshank.

NICHOLAS NICKLEBY. 2 vols. With 40 Illustrations by Phiz.

OLD CURIOSITY SHOP and REPRINTED PIECES. 2 vols. With Illustrations by Cattermole, &c.

BARNABY RUDGE and HARD TIMES. 2 vols. With Illustrations by Cattermole, &c.

MARTIN CHUZZLEWIT. 2 vols. With 40 Illustrations by Phiz.

AMERICAN NOTES and PICTURES FROM ITALY. 2 vol. With 8 Illustrations.

DOMBEY AND SON. 2 vols. With 40 Illustrations by Phiz.

DAVID COPPERFIELD. 2 vols. With 40 Illustrations by Phiz.

BLEAK HOUSE. 2 vols. With 40 Illustrations by Phiz.

LITTLE DORRIT. 2 vols. With 40 Illustrations by Phiz.

A TALE OF TWO CITIES. With 16 Illustrations by Phiz.

THE UNCOMMERCIAL TRAVELLER. With 8 Illustrations by Marcus Stone.

GREAT EXPECTATIONS. With 8 Illustrations by Marcus Stone.

OUR MUTUAL FRIEND. 2 vols. With 40 Illustrations by Marcus Stone.

CHRISTMAS BOOKS. With 17 Illustrations by Sir Edwin Landseer, R.A., Macise, R.A., &c. &c.

HISTORY OF ENGLAND. With 8 Illustrations by Marcus Stone.

CHRISTMAS STORIES. (From "Household Words" and "All the Year Round.") With 14 Illustrations.

EDWIN DROOD AND OTHER STORIES. With 12 Illustrations by S. I. Fildes.

DICKENS'S (CHARLES) WORKS.

THE POPULAR LIBRARY EDITION

OF THE WORKS OF

CHARLES DICKENS,

In 30 Vols., large crown 8vo, price £6; separate Vols. 4s. each.

An Edition printed on good paper, each volume containing 16 full-page Illustrations, selected from the Household Edition, on Plate Paper.

SKETCHES BY "BOZ."

PICKWICK. 2 vols.

OLIVER TWIST.

NICHOLAS NICKLEBY. 2 vols.

MARTIN CHUZZLEWIT. 2 vols.

DOMBEY AND SON. 2 vols.

DAVID COPPERFIELD. 2 vols.

CHRISTMAS BOOKS.

OUR MUTUAL FRIEND. 2 vols.

CHRISTMAS STORIES.

BLEAK HOUSE. 2 vols.

LITTLE DORRIT. 2 vols.

OLD CURIOSITY SHOP AND REPRINTED PIECES. 2 vols.

BARNABY RUDGE. 2 vols.

UNCOMMERCIAL TRAVELLER.

GREAT EXPECTATIONS.

TALE OF TWO CITIES.

CHILD'S HISTORY OF ENGLAND.

EDWIN DROOD AND MISCELLANIES.

PICTURES FROM ITALY AND AMERICAN NOTES.

DICKENS'S (CHARLES) WORKS. .

HOUSEHOLD EDITION.

In 22 Volumes. Crown 4to, cloth, £4 8s. 6d.

- MARTIN CHUZZLEWIT, with 59 Illustrations, cloth, 5s.
- DAVID COPPERFIELD, with 60 Illustrations and a Portrait, cloth, 5s.
- BLEAK HOUSE, with 61 Illustrations, cloth, 5s.
- LITTLE DORRIT, with 58 Illustrations, cloth, 5s.
- PICKWICK PAPERS, with 56 Illustrations, cloth, 5s.
- OUR MUTUAL FRIEND, with 58 Illustrations, cloth, 5s.
- NICHOLAS NICKLEBY, with 59 Illustrations, cloth, 5s.
- DOMBEY AND SON, with 61 Illustrations, cloth, 5s.
- EDWIN DROOD; REPRINTED PIECES; and other Stories, with 30 Illustrations, cloth, 5s.
- THE LIFE OF DICKENS. By JOHN FORSTER. With 40 Illustrations. Cloth, 5s.
- BARNABY RUDGE, with 46 Illustrations, cloth, 4s.
- OLD CURIOSITY SHOP, with 32 Illustrations, cloth, 4s.
- CHRISTMAS STORIES, with 23 Illustrations, cloth, 4s.
- OLIVER TWIST, with 28 Illustrations, cloth, 3s.
- GREAT EXPECTATIONS, with 26 Illustrations, cloth, 3s.
- SKETCHES BY "BOZ," with 36 Illustrations, cloth, 3s.
- UNCOMMERCIAL TRAVELLER, with 26 Illustrations, cloth, 3s.
- CHRISTMAS BOOKS, with 28 Illustrations, cloth, 3s.
- THE HISTORY OF ENGLAND, with 15 Illustrations, cloth, 3s.
- AMERICAN NOTES and PICTURES FROM ITALY, with 18 Illustrations, cloth, 3s.
- A TALE OF TWO CITIES, with 25 Illustrations, cloth, 3s.
- HARD TIMES, with 20 Illustrations, cloth, 2s. 6d.

A New Edition of
CHARLES DICKENS'S WORKS.

Messrs. CHAPMAN & HALL beg to announce an Edition of CHARLES DICKENS'S WORKS, entitled:—

THE CABINET EDITION.

To be completed in 30 vols. small fcap. 8vo, Marble Paper Sides, Cloth Backs, with uncut edges, price Eighteenpence each.

A Complete Work will be Published every Month and each Volume will contain Eight Illustrations reproduced from the Originals.

CHRISTMAS BOOKS, One Vol.,
 MARTIN CHUZZLEWIT, Two Vols.,
 DAVID COPPERFIELD, Two Vols.,
Are now Ready.

DICKENS'S (CHARLES) WORKS.

MR. DICKENS'S READINGS.

<i>Fcap. 8vo, bound.</i>	
CHRISTMAS CAROL IN PROSE. 1s.	STORY OF LITTLE DOMBEY. 1s.
CRICKET ON THE HEARTH. 1s.	POOR TRAVELLER, BOOTS AT
CHIMES: A GOBLIN STORY. 1s.	THE HOLLY-TREE INN, and
	MRS. GAMP. 1s.

A CHRISTMAS CAROL, with the Original Coloured Plates, being a reprint of the Original Edition. Small 8vo, red cloth, gilt edges, 5s.

ONE SHILLING EACH. *Reprinted from the Original Plates.*

A CHRISTMAS CAROL. Fcap. cloth, 1s.

THE CHIMES: A Goblin Story. Fcap. cloth, 1s.

The Cheapest and Handiest Edition of
THE WORKS OF CHARLES DICKENS.

The Pocket-Volume Edition of Charles Dickens's Works.

In 30 Vols. small fcap. 8vo, £2 5s.

New and Cheap Issue of
THE WORKS OF CHARLES DICKENS.

In pocket volumes.

PICKWICK PAPERS, with 8 Illustrations, cloth, 2s.
 NICHOLAS NICKLEBY, with 8 Illustrations, cloth, 2s.
 OLIVER TWIST, with 8 Illustrations, cloth, 2s.
 SKETCHES BY "BOZ," with 8 Illustrations, cloth, 1s.
 OLD CURIOSITY SHOP, with 8 Illustrations, cloth, 2s.
 BARNABY RUDGE, with 16 Illustrations, cloth, 2s.
 AMERICAN NOTES AND PICTURES FROM ITALY, with 8 Illustrations, cloth, 1s. 6d.
 CHRISTMAS BOOKS, with 8 Illustrations, cloth, 1s. 6d.
 MARTIN CHUZZLEWIT, with 8 Illustrations, cloth, 2s.

*List of Books, Drawing Examples, Diagrams, Models,
Instruments, etc.,*

INCLUDING

THOSE ISSUED UNDER THE AUTHORITY OF THE SCIENCE
AND ART DEPARTMENT, SOUTH KENSINGTON, FOR THE
USE OF SCHOOLS AND ART AND SCIENCE CLASSES.

CATALOGUE OF MODERN WORKS ON SCIENCE
AND TECHNOLOGY. 8vo, sewed, 1s.

BENSON (W.)—

PRINCIPLES OF THE SCIENCE OF COLOUR.

Small 4to, 15s.

MANUAL OF THE SCIENCE OF COLOUR. Coloured

Frontispiece and illustrations. 24mo, m. 6d.

BRADLEY (THOMAS), of the Royal Military Academy, Woolwich—

ELEMENTS OF GEOMETRICAL DRAWING. In Two

Parts, with 60 Plates. Oblong folio, half-bound, each part 16s.

Selections (from the above) of 20 Plates, for the use of the Royal Military
Academy, Woolwich. Oblong folio, half-bound, 16s.

BURCHETT—

LINEAR PERSPECTIVE. With Illustrations. Post 8vo, 7s.

PRACTICAL GEOMETRY. Post 8vo, 5s.

DEFINITIONS OF GEOMETRY. Third Edition. 24mo,
sewed, 3d.

CARROLL (JOHN)—

FREEHAND DRAWING LESSONS FOR THE BLACK
BOARD. 6s.

CUBLEY (W. H.)—

A SYSTEM OF ELEMENTARY DRAWING. With
Illustrations and Examples. Imperial 4to, sewed, 3s. 6d.

DAVISON (ELLIS A.)—

DRAWING FOR ELEMENTARY SCHOOLS. Post
8vo, 3s.

MODEL DRAWING. 12mo, 3s.

DELAMOTTE (P. H.)—

PROGRESSIVE DRAWING-BOOK FOR BEGINNERS.
8mo, 3s. 6d.

DYCE—

**DRAWING-BOOK OF THE GOVERNMENT SCHOOL
OF DESIGN: ELEMENTARY OUTLINES OF ORNAMENT.** 50 Plates.
Small folio, sewed, 5s.; mounted, 18s.

INTRODUCTION TO DITTO. Fcap. 8vo, 6d.

FOSTER (VERE)—

DRAWING-BOOKS:

Forty-six Numbers, at 2d. each.

DRAWING-CARDS:

Freehand Drawing: First Grade, Sets I., II., III., 1s. each.

Second Grade, Set I., 6s.

HENSLOW (PROFESSOR)—

**ILLUSTRATIONS TO BE EMPLOYED IN THE
PRACTICAL LESSONS ON BOTANY.** Post 8vo, sewed, 6d.

JACOBSTHAL (E.)—

GRAMMATIK DER ORNAMENTE, in 7 Parts of 20
Plates each. Unmounted, £3 13s. 6d.; mounted on cardboard, £11 4s. Th
Parts can be had separately.

JEWITT—

HANDBOOK OF PRACTICAL PERSPECTIVE. 18mo,
15. 6d.

LINDLEY (JOHN)—

SYMMETRY OF VEGETATION: Principles to be
Observed in the Delineation of Plants. 12mo, sewed, 12.

MARSHALL—

HUMAN BODY. Text and Plates reduced from the large
Diagrams. 2 vols., £1 12.

NEWTON (E. TULLEY), F.G.S.—

**THE TYPICAL PARTS IN THE SKELETONS OF A
CAT, DUCK, AND CODFISH,** being a Catalogue with Comparative Descriptions arranged in a Tabular Form. Demy 8vo, 35.

OLIVER (PROFESSOR)—

ILLUSTRATIONS OF THE VEGETABLE KINGDOM.
109 Plates. Oblong 8vo. Plain, 16s.; coloured, £1 6s.

POYNTER (E. J.), R.A., issued under the superintendence of—

THE SOUTH KENSINGTON DRAWING SERIES.

FREEHAND—ELEMENTARY ORNAMENT: books 6d., cards,
9d. each.

FREEHAND—FIRST GRADE: books 6d., cards 1s. each.

FREEHAND—SECOND GRADE: books 1s., cards 1s. 6d. each.

FREEHAND—PLANTS FROM NATURE: books 6d., cards,
1s. each.

FREEHAND—HUMAN FIGURE, ELEMENTARY: books 6d.

FREEHAND—HUMAN FIGURE, ADVANCED: books 2s.
each.

**FREEHAND—FIGURES FROM THE CARTOONS OF
RAPHAEL:** four books, 2s. each.

FREEHAND—ELEMENTARY PERSPECTIVE DRAWING.

By S. J. CARTLIDGE, F.R.Hist.S. Books 1s. each; or one
volume, cloth, 5s.

REDGRAVE -

MANUAL AND CATECHISM ON COLOUR, Fifth Edition. 24mo, sewed, 9d.

ROBSON (GEORGE)-

ELEMENTARY BUILDING CONSTRUCTION. Oblong folio, sewed, 8s.

WALLIS (GEORGE)-

DRAWING-BOOK. Oblong, sewed, 3s. 6d.; mounted, 8s.

WORNUM (R. N.)-

THE CHARACTERISTICS OF STYLES: An Introduction to the Study of the History of Ornamental Art. Royal 8vo, 8s.

ELEMENTARY DRAWING COPY-BOOKS, for the Use of Children from four years old and upwards, in Schools and Families. Compiled by a Student certificated by the Science and Art Department as an Art Teacher. Seven Books in 4to, sewed:

Book I.	Letters, 8d.	Book IV.	Objects, 8d.
" II.	Diuis, 8d.	" V.	Leaves, 8d.
" III.	Geometrical and Ornamental Forms, 8d.	" VI.	Birds, Animals, &c., 8d.
		" VII.	Leaves, Flowers, and Sprays, 8d.

*. Or in Sets of Seven Books, 4s. 6d.

PRINCIPLES OF DECORATIVE ART. Folio, sewed, 1s.

DIAGRAM OF THE COLOURS OF THE SPECTRUM, with Explanatory Letterpress, on roller, 5s.

COPIES FOR OUTLINE DRAWING:

LARGE FREEHAND EXAMPLES FOR CLASS TEACHING. Specially prepared under the authority of the Science and Art Department. Six Sheets. 50s. 8d. by 40. 5s.

DYCE'S ELEMENTARY OUTLINES OF ORNAMENT, 50 Selected Plates, mounted back and front, 18s.; unmounted, sewed, 5s.

WEITERICHT'S OUTLINES OF ORNAMENT, reproduced by Herman, 20 Plates, mounted back and front, 8s. 6d.; unmounted, 2s.

MORGEN'S OUTLINES OF THE HUMAN FIGURE, reproduced by Herman, 20 Plates, mounted back and front, 15s.; unmounted, 3s. 4d.

TARSIA, from Granner, Four Plates, mounted, 3s. 6d., unmounted, 7d.

ALBERTOLL'S FOLIAGE, Four Plates, mounted, 3s. 6d.; unmounted, 5d.

OUTLINE OF TRAJAN FRIEZE, mounted, 2s.

WALLIS'S DRAWING-BOOK, mounted, 8s., unmounted, 3s. 6d.

OUTLINE DRAWINGS OF FLOWERS. Eight Plates, mounted, 3s. 6d.; unmounted, 8d.

COPIES FOR SHADED DRAWING :

COURSE OF DESIGN. By CH. BARGUE (French), 20 Sheets, £2 9s.

ARCHITECTURAL STUDIES. By J. B. TRIFON. 10 Plates, £1.

MECHANICAL STUDIES. By J. B. TRIFON. 15s. per dozen.

FOLIATED SCROLL FROM THE VATICAN, unmounted, 5d.; mounted, 1s. 3d.

TWELVE HEADS after Holbein, selected from his Drawings in Her Majesty's Collection at Windsor. Reproduced in Autotype. Half imperial, £1 16s.

COLOURED EXAMPLES :

A SMALL DIAGRAM OF COLOUR, mounted, 1s. 6d.; unmounted, 9d.

COTMAN'S PENCIL LANDSCAPES (set of 9), mounted, 15s.

„ SEPIA DRAWINGS (set of 5), mounted, £1.

ALLONGE'S LANDSCAPES IN CHARCOAL (Six), 4s. each, or the set £1 4s.

RADDE COLOUR SCALE, in case, £1.

SOLID MODELS, &c. :

*Box of Models, £1 4s.

A Stand with a universal joint, to show the solid models, &c., £1 18s.

*One Wire Quadrangle, with a circle and cross within it, and one straight wire. One solid cube. One Skeleton Wire Cube. One Sphere. One Cone. One Cylinder. One Hexagonal Prism. £2 2s.

Skeleton Cube in wood, 3s. 6d.

18-inch Skeleton Cube in wood, 12s.

*Three objects of *form* in Pottery :

Indian Jar,	} 18s. 6d.
Celadon Jar,	
Bottle,	

*Five selected Vases in Majolica Ware, £2 11s.

*Three selected Vases in Earthenware, 18s.

Imperial Deal Frames, glazed, without sunk rings, 10s. each.

*Davidson's Smaller Solid Models, in Box, £2, containing—

2 Square Slabs.	Octagon Prism.	Triangular Prism.
Oblong Blocks (steps).	Cylinder.	Pyramid, Equilateral.
Cubes.	Cone.	Pyramid, Isosceles.
Square Blocks.	Jointed Cross.	Square Block.

SOLID MODELS, &c.—*Continued.*

*Davidson's Advanced Drawing Models, £9.—The following is a brief description of the Models:—An Obelisk—composed of 2 Octagonal Slabs, 25 and 20 inches across, and each 3 inches high; 1 Cube, 12 inches edge; 1 Monolith (forming the body of the obelisk) 3 feet high; 1 Pyramid, 6 inches base; the complete object is thus nearly 5 feet high. A Market Cross—composed of 3 Slabs, 24, 18, and 12 inches across, and each 3 inches high; 1 Upright, 3 feet high; 1 Cross Arms, united by mortise and tenon joints; complete height, 3 feet 9 inches. A Step-Ladder, 23 inches high. A Kitchen Table, 24½ inches high. A Chair to correspond. A Four-legged Stool, with projecting top and cross rails, height 14 inches. A Tub, with handles and projecting hoops, and the divisions between the staves plainly marked. A strong Trestle, 18 inches high. A Hollow Cylinder, 9 inches in diameter, and 12 inches long, divided lengthwise. A Hollow Sphere, 9 inches in diameter, divided into semi-spheres, one of which is again divided into quarters: the semi-sphere, when placed on the cylinder, gives the form and principles of shading a dome, whilst one of the quarters placed on half the cylinder forms a niche.

*Davidson's Apparatus for Teaching Practical Geometry (22 models), £5.

*Binn's Models for Illustrating the Elementary Principles of Orthographic Projection as applied to Mechanical Drawing, in box, £1 2s.

Miller's Class Drawing Models.—These Models are particularly adapted for teaching large classes; the stand is very strong, and the universal joint will hold the Models in any position. *Wood Models*: Square Prism, 12 inches side, 28 inches high; Hexagonal Prism, 14 inches side, 18 inches high; Cube, 14 inches side; Cylinder, 13 inches diameter, 16 inches high; Hexagon Pyramid, 14 inches diameter, 22½ inches side; Square Pyramid, 14 inches side, 20½ inches side; Cone, 13 inches diameter, 20½ inches side; Skeleton Cube, 23 inches solid wood 1¾ inch square; Intersecting Circles, 19 inches solid wood 2¼ by 1¼ inches. *Wire Models*: Triangular Prism, 17 inches side, 22 inches high; Square Prism, 14 inches side, 20 inches high; Hexagonal Prism, 16 inches diameter, 21 inches high; Cylinder, 14 inches diameter, 21 inches high; Hexagon Pyramid, 18 inches diameter, 24 inches high; Square Pyramid, 17 inches side, 24 inches high; Cone, 17 inches side, 24 inches high; Skeleton Cube, 19 inches side; Intersecting Circles, 19 inches side; Plain Circle, 19 inches side; Plain Square, 19 inches side. Table, 27 inches by 21½ inches. Stand. The set complete, £14 13s.

Large Compasses, with chalk-holder, 5s.

*Slip, two set squares and T square, 5s.

*Parker's Case of Instruments, containing 6-inch compasses with pen and pencil leg, 5s.

*Prize Instrument Case, with 6-inch compasses pen and pencil leg, 2 small compasses, pen and scale, 18s.

6-inch Compasses, with shifting pen and point, 4s. 6d.

* Models, &c., entered as sets, can only be supplied in sets.

LARGE DIAGRAMS.

ASTRONOMICAL:

TWELVE SHEETS. By JOHN DREW, Ph. Dr., F.R.S.A. Sheets, £2 8s.; on rollers and varnished, £4 4s.

BOTANICAL:

NINE SHEETS. Illustrating a Practical Method of Teaching Botany. By Professor HENSLOW, F.L.S. £2; on rollers and varnished, £3 3s.

CLASS.	DIVISION.	SECTION.	DIAGRAM.
Dicotyledon ..	Angiospermous ..	Thalamifloral ..	1
		Calycifloral ..	2 & 3
		Corollifloral ..	4
		Incomplete ..	5
Monocotyledons ..	Gymnospermous ..	..	6
		..	7
	Petaloid ..	Superior ..	8
		Inferior ..	9
	Glumaceous ..	..	9

* Models, &c., entered as sets, can only be supplied in sets.

BUILDING CONSTRUCTION:

TEN SHEETS. By WILLIAM J. GLESSY. £1 1s.

LAXTON'S EXAMPLES OF BUILDING CONSTRUCTION, containing 32 Imperial Plates, £1.

BUSBRIDGE'S DRAWING OF BUILDING CONSTRUCTION. 36 Sheets, 9s. Mounted on cardboard, 18s.

GEOLOGICAL:

DIAGRAM OF BRITISH STRATA. By H. W. BRISTOW, F.R.S., F.G.S. A Sheet, 4s.; on roller and varnished, 7s. 6d.

MECHANICAL:

DIAGRAMS OF THE MECHANICAL POWERS, AND THEIR APPLICATIONS IN MACHINERY AND THE ARTS GENERALLY. By Dr. JOHN ARTHURSON. 8 Diagrams, highly coloured, on stout paper, 3 feet 6 inches by 2 feet 6 inches. Sheets £1; mounted on rollers, £2.

DIAGRAMS OF THE STEAM-ENGINE. By Prof. GOODE and Prof. SMITHLEY. Stout paper, 40 inches by 27 inches, highly coloured. 41 Diagrams (52½ Sheets), £6 6s.; varnished and mounted on rollers, £11 2s.

MACHINE DETAILS. By Prof. UNWIN. 11 Coloured Diagrams. Sheets, £2 2s.; mounted on rollers and varnished, £3 14s.

SELECTED EXAMPLES OF MACHINES, OF IRON AND WOOD (French). By STANISLAS PRETIT. 60 Sheets, £3 5s.; 23s. per dozen.

BUSBRIDGE'S DRAWINGS OF MACHINE CONSTRUCTION. 50 Sheets, 12s. 6d. Mounted £1 5s.

PHYSIOLOGICAL :

ELEVEN SHEETS. Illustrating Human Physiology, Life Size and Coloured from Nature. Prepared under the direction of JOHN MARSHALL, F.R.S., F.R.C.S., &c. Each Sheet, 12s. 6d. On canvas and rollers, varnished, £1 1s.

1. THE SKELETON AND LIGAMENTS.
2. THE MUSCLES, JOINTS, AND ANIMAL MECHANICS.
3. THE VISCERA IN POSITION.—THE STRUCTURE OF THE LUNGS.
4. THE ORGANS OF CIRCULATION.
5. THE LYMPHATICS OR ABSORBENTS.
6. THE ORGANS OF DIGESTION.
7. THE BRAIN AND NERVES.—THE ORGANS OF THE VOICE.
- 8 & 9. THE ORGANS OF THE SENSES.
- 10 & 11. THE MICROSCOPIC STRUCTURE OF THE TEXTURES AND ORGANS.

HUMAN BODY, LIFE SIZE. By JOHN MARSHALL, F.R.S., F.R.C.S. Each Sheet, 12s. 6d. : on canvas and rollers, varnished, £1 1s. Explanatory Key, 1s.

- 1, 2, 3. THE SKELETON, Front, Back, and Side View.
- 5, 6, 7. THE MUSCLES, Front, Back, and Side View.

ZOOLOGICAL :

TEN SHEETS. Illustrating the Classification of Animals. By ROBERT PATTERSON. £2 : on canvas and rollers, varnished, £3 10s.

PHYSIOLOGY AND ANATOMY OF THE HONEY BEE.

Two Diagrams. 7s. 6d.

NEW NOVELS.

(To be had at all Libraries.)

BY THE HON. MRS. HENRY CHETWYND.

MRS. DORRIMAN. By the HON. MRS. HENRY CHETWYND.

3 vols.

BY GEORGE GISSING.

ISABEL CLARENDON. By GEORGE GISSING. 2 vols.

(In April.)

BY MRS. BERENS.

A WOMAN WITH A PAST. By MRS. BERENS. 3 vols.

(In April.)

BY S. LAING.

A SPORTING QUIXOTE: or, The Life and Adventures of

the Hon. Augustus Fimuddle, afterwards Earl of Muddleton. By S. LAING.
2 vols.

BY ARTHUR GRIFFITHS.

THE THIN RED LINE. By ARTHUR GRIFFITHS. 2 vols.

(In April.)

BY COLONEL FIFE-COOKSON.

BAYLERBAY; OR, STRANGERS IN TURKEY. By COLONEL

FIFE-COOKSON. 2 vols.

(In April.)

BY MRS. EDWARD KENNARD.

KILLED IN THE OPEN. By MRS. EDWARD KENNARD,

Author of "The Right Sort," "Straight as a Die," etc., etc. 3 vols.

THE FORTNIGHTLY REVIEW.

Edited by T. H. S. ESCOTT.

THE FORTNIGHTLY REVIEW is published on the 1st of every month, and a Volume is completed every Six Months.

The following are among the Contributors:—

SIR RUTHERFORD ALCOCK.
 MATHEW ARNOLD.
 PROFESSOR BAIN.
 SIR SAMUEL BAKER.
 PROFESSOR BEESLY.
 PAUL BERT.
 BARON GEORGETON BUNSEN.
 DR. BRIDGES.
 HON. GEORGE C. BRODRICK.
 JAMES BRYCE, M.P.
 THOMAS BURT, M.P.
 SIR GEORGE CAMPBELL, M.P.
 THE EARL OF CARNARVON.
 EMILIO CASTELAR.
 RT. HON. J. CHAMBERLAIN, M.P.
 PROFESSOR SIDNEY COLVIN.
 MONTAGUE COOKSON, Q.C.
 I. H. COURTNEY, M.P.
 G. H. DARWIN.
 SIR GEORGE W. DASENT.
 PROFESSOR A. V. DICEY.
 RIGHT HON. H. FAWCETT, M.P.
 EDWARD A. FREEMAN.
 SIR BARTLE FRERE, BART.
 J. A. FROUDE.
 MRS. GARRET-ANDERSON.
 J. W. L. GLAISHER, F.R.S.
 M. E. GRANT DUFF, M.P.
 THOMAS HARE.
 F. HARRISON.
 LORD HOUGHTON.
 PROFESSOR HUXLEY.
 PROFESSOR R. C. JEBB.
 PROFESSOR JEVONS.
 ANDREW LANG.
 EMILE DE LAVELEYE.

T. E. CLIFFE LESLIE.
 SIR JOHN LUBBOCK, M.P.
 THE EARL LYTON.
 SIR H. S. MAINE.
 DR. MAUDSLEY.
 PROFESSOR MAX MÜLLER.
 G. OSBORNE MORGAN, Q.C., M.P.
 PROFESSOR HENRY MORLEY.
 WILLIAM MORRIS.
 PROFESSOR H. N. MOSELEY.
 F. W. H. MYERS.
 F. W. NEWMAN.
 PROFESSOR JOHN NICHOL.
 W. G. PALGRAVE.
 WALTER H. PATER.
 RT. HON. LYON PLAYFAIR, M.P.
 DANTE GABRIEL ROSSETTI.
 LORD SHERBROOKE.
 HERBERT SPENCER.
 HON. E. L. STANLEY.
 SIR J. FITZJAMESSTEPHEN, Q.C.
 LESLIE STEPHEN.
 J. HUTCHISON STIRLING.
 A. C. SWINBURNE.
 DR. VON SYBEL.
 J. A. SYMONDS.
 THE REV. EDWARD F. TALBOT
 (WARDEN OF KEBLE COLLEGE).
 SIR RICHARD TEMPLE, BART.
 W. T. THORNTON.
 HON. LIONEL A. TOLLEMACHE.
 H. D. TRAILL.
 ANTHONY TROLLOPE.
 PROFESSOR TYNDALL.
 A. J. WILSON.
 THE EDITOR.

&c. &c. &c.

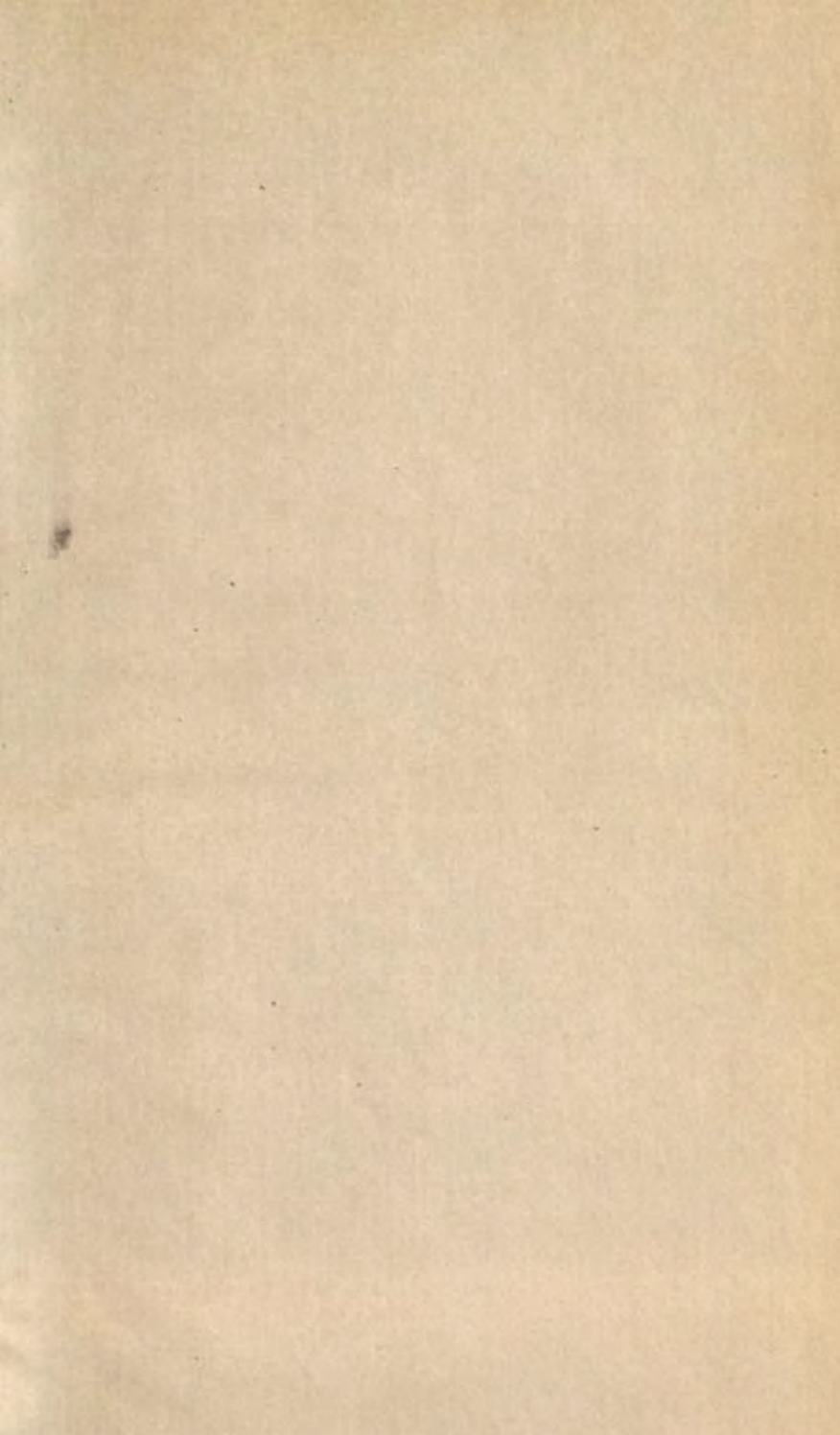
THE FORTNIGHTLY REVIEW is published at 2s. 6d.

CHAPMAN & HALL, LIMITED, 11, HENRIETTA STREET,
 COVENT GARDEN, W.C.

CHARLES DICKENS AND EVANS

[CRYSTAL PALACE PRESS.]





mc
5 ^{at} 22/11/76

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY

GOVT. OF INDIA
Department of Archaeology
NEW DELHI

Please help us to keep the book
clean and moving.
